



MODULE	CA: Capital Adequacy
CHAPTER	CA-A Introduction

## CA-A.1 Application

- CA-A.1.1 Regulations in this Module are applicable to locally incorporated banks on both a stand-alone basis (i.e. including their foreign branches), and on a consolidated group basis (i.e. including their subsidiaries and any other investments which are included or consolidated into the group accounts or are required to be consolidated for regulatory purposes by the CBB).
- CA-A.1.2 In addition to licensees mentioned in Paragraph CA-A.1.1, certain of these regulations (in particular gearing and market risk requirements) are also applicable to Bahrain branches of foreign retail bank licensees.
- CA-A.1.3 Regulations in this module are applicable to locally incorporated Islamic banks (hereinafter referred to as “the banks”) on both a stand-alone and consolidated group basis.
- CA-A.1.4 If the banks have investments in other entities, the banks must also apply the rules set out in the Prudential Consolidation and Deduction Requirements Module for the calculation of their solo and consolidated Capital Adequacy Ratio (CAR).



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## **CA-A.2 Purpose**

CA-A.2.1 The purpose of this Module is to set out the Central Bank's capital adequacy regulations and provide guidance on the risk measurement for the calculation of capital requirements by banks referred to under CA-A.1.1. This requirement is supported by Article 44(c) of the Central Bank of Bahrain and Financial Institutions Law (Decree No. 64 of 2006).

CA-A.2.2 The Module also sets out the minimum gearing requirements which relevant banks (referred to in Section CA-A.1) must meet as a condition of their licensing.

CA-A.2.3 Principle 9 of the Principles of Business requires that Islamic bank licensees maintain adequate human, financial and other resources, sufficient to run their business in an orderly manner (see Section PB-1.1.9). In addition, Condition 5 of CBB's Licensing Conditions (Section LR-2.5) requires Islamic bank licensees to maintain financial resources in excess of the minimum requirements specified in Module CA (Capital Adequacy).

CA-A.2.4 The requirements specified in this Module vary according to the Category of Islamic bank licensee concerned, their inherent risk profile, and the volume and type of business undertaken. The purpose of such requirements is to ensure that Islamic bank licensees hold sufficient capital to provide some protection against unexpected losses, and otherwise allow conventional banks to effect an orderly wind-down of their operations, without loss to their depositors. The minimum capital requirements specified here may not be sufficient to absorb all unexpected losses.

### ***Legal Basis***

**CA-A.2.5** This Module contains the CBB's Directive relating to the capital adequacy of Islamic bank licensees, and is issued under the powers available to the CBB under Article 38 of the CBB Law. The Directive in this Module is applicable to all Islamic bank licensees.

CA-A.2.6 For an explanation of the CBB's rule-making powers and different regulatory instruments, see Section UG-1.1.

CA-A.2.7 The CBB requires in particular that the banks maintain adequate capital, in accordance with the Regulations in this module, against their risks as capital provides banks with a cushion to absorb losses without endangering customer accounts. As such, the CBB also requires the relevant banks to maintain adequate liquidity and identify and control their large exposures which might otherwise be a source of loss to a licensee on a scale that might threaten its solvency.



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## **CA-A.2 Purpose (continued)**

CA-A.2.8 These regulations are consistent in all substantial respects with the approach recommended by the Basel Committee on Banking Supervision and Islamic Financial Services Board (IFSB) for capital adequacy.

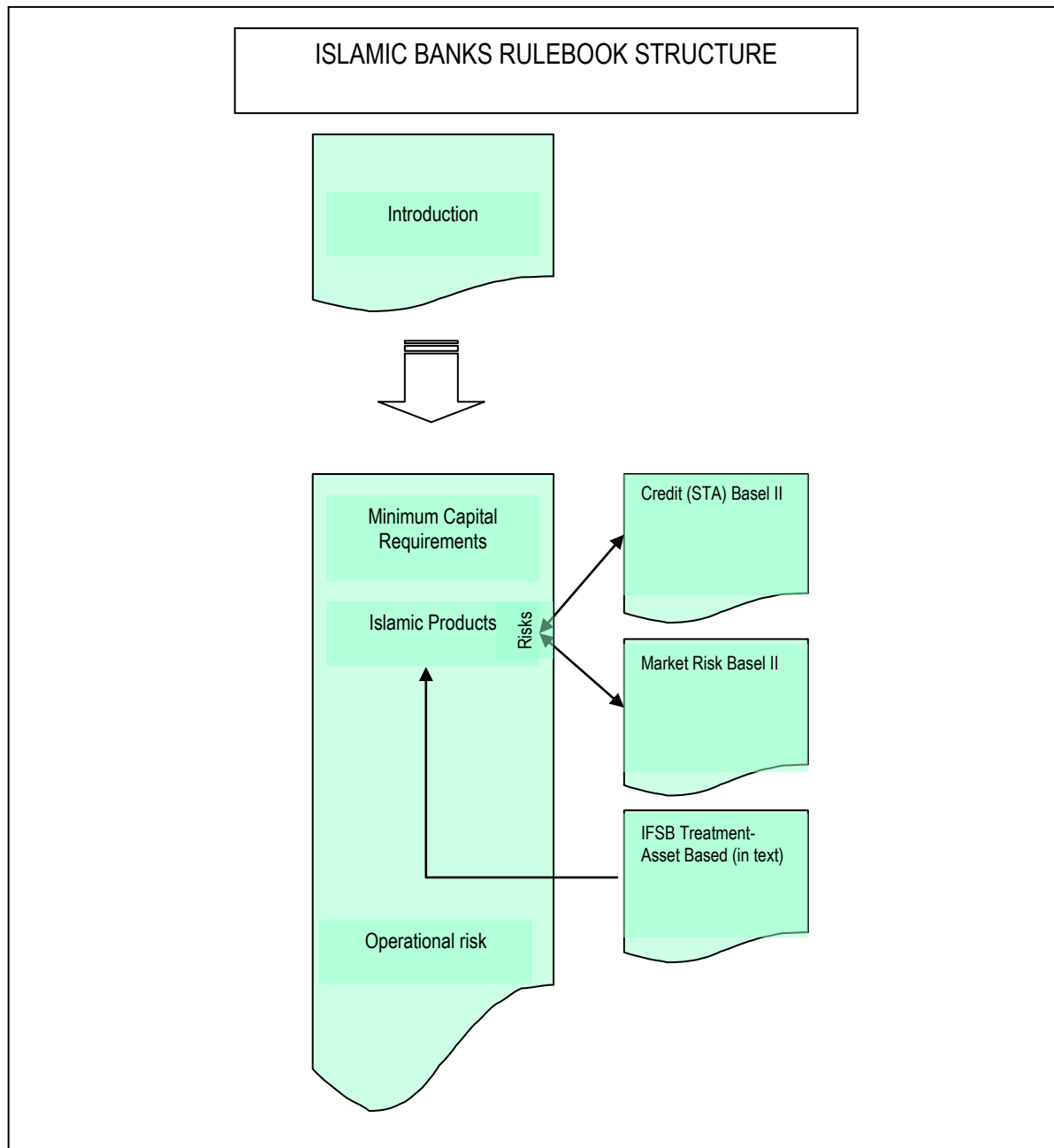
CA-A.2.9 The CBB recognises that the Basel Committee guidelines may not address specific characteristics of the various products and services offered by Islamic banks. Therefore, the CBB has adopted a risk-based approach and has tailored the regulations to address the specific risk characteristics of Islamic banks. The structure of these regulations is explained on the next page.

CA-A.2.10 This module provides support for certain other parts of the Rulebook, mainly:

- (a) Prudential Consolidation and Deduction Requirements;
- (b) Licensing and Authorisation Requirements;
- (c) CBB Reporting Requirements;
- (d) Credit Risk Management;
- (d) Market Risk Management;
- (e) Operational Risk Management;
- (f) Liquidity Risk Management;
- (g) High Level Controls;
- (h) Relationship with Audit Firms; and
- (i) Penalties and Fines.



CA-A.2 Purpose (continued)





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## **CA-A.3 Capital Adequacy Ratio**

**CA-A.3.1** Historically, on a consolidated basis, the CBB has set a minimum Capital Adequacy Ratio ("CAR") of 12.0% for all locally incorporated banks. Furthermore, on a solo basis, the parent bank has been required to maintain a minimum CAR of 8.0% (i.e. unconsolidated). The arrangements outlined below will apply once banks have been subject to a Pillar 2 risk profile assessment by the CBB or an acceptable audit firm. Until such an assessment has been completed, the existing 12% and 8% minimum capital ratio requirements (as outlined in Module CA-2.5 October 2006 edition) will remain in place.

**CA-A.3.2** **CAR will be calculated by applying the regulatory capital to the numerator and risk-weighted assets (RWAs) to the denominator.**

### **Eligible Capital**

$$\begin{aligned}
 & \{ \text{Total Risk-weighted Assets (Credit}^b + \text{Market}^b \text{ Risks) Plus Operational Risks} \\
 & \quad \text{Less} \\
 & \quad \text{Risk-weighted Assets funded by Restricted PSIA}^c \text{ (Credit}^b + \text{Market}^b \text{ Risks)} \\
 & \quad \text{Less} \\
 & \quad (1 - \alpha) [\text{Risk-weighted Assets funded by Unrestricted PSIA}^c \text{ (Credit}^b + \text{Market}^b \text{ Risks)}] \\
 & \quad \text{Less} \\
 & \quad \alpha [\text{Risk-weighted Assets funded by PER and IRR of Unrestricted PSIA}^c \text{ (Credit}^b + \\
 & \quad \quad \text{Market}^b \text{ Risks)}] \}
 \end{aligned}$$

- (a) Total RWA include those financed by both restricted and unrestricted Profit Sharing Investment Accounts (PSIA).
  - (b) Credit and market risks for on- and off-balance sheet exposures.
  - (c) Where the funds are commingled, the RWA funded by PSIA are calculated based on their pro-rata share of the relevant assets. PSIA balances include PER and Investment risk reserve (IRR) or equivalent reserves.
  - (d) –  $\alpha$  refers to the proportion assets funded by unrestricted PSIA which, as determined by the CBB, is 30%.
  - (e) The relevant proportion of risk-weighted assets funded by the PSIA's share of PER and by IRR is deducted from the denominator. The PER has the effect of reducing the displaced commercial risk and the IRR has the effect of reducing any future losses on the investment financed by the PSIA.
- The above formula is applicable as the Islamic banks may smooth income to the Investment Account Holders (IAHs) as part of a mechanism to minimise withdrawal risk and is concerned with systemic risk.



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### **CA-A.3 Capital Adequacy Ratio (continued)**

**CA-A.3.3** All locally incorporated banks are required to maintain a capital ratio both on a solo (and a consolidated basis where applicable) above the minimum “trigger” CAR of 8%. Failure to remain above the trigger ratio will result in Enforcement and other measures as outlined in Section CA-1.4.

**CA-A.3.4** All locally incorporated banks will be required to maintain capital ratios above individually set "target" CARs on a solo and on a consolidated basis. These target CARs will be set at an initial minimum of 8.5% and may in the case of high risk banks be set at levels above the 12.5% target ratio set prior to January 2008. Failure to remain above the target ratio will result in Enforcement and other measures as outlined in Section CA-1.4.

#### ***Eligible Capital***

**CA-A.3.5** Banks are allowed two classes of capital (see section CA-2.2) to meet their capital requirements for credit risk, operational risk and market risk, as set out below:

**Tier 1:** Core capital – Supports the calculation of credit risk weighted assets, operational risk and market risk.

**Tier 2:** Supplementary capital – Supports credit risk, operational risk and market risk subject to limitations.

#### ***Risk-weighted Assets***

**CA-A.3.6** Total risk-weighted assets are determined by

- (i) multiplying the capital requirements for market risk and operational risk by 12.5; and
- (ii) adding the resulting figures to the sum of risk-weighted assets for credit risk.

**CA-A.3.7** Islamic banks are not contractually obliged to make good losses arising from Islamic financing assets funded by the investment accounts, unless these losses arise from the negligence on the part of the Islamic bank as manager (Mudarib) or as agent (Wakeel). However to be prudent, CBB requires Islamic banks to provide regulatory capital to cover minimum requirement arising from 30% of the risk weighted assets and contingencies financed by the unrestricted investment accounts. Therefore, for the purpose of calculating its Capital Adequacy Ratio (CAR), the risk-weighted assets of an Islamic bank consist of the sum of the risk-weighted assets financed by the Islamic bank’s own capital and liabilities, plus 30% of the risk-weighted assets financed by the Islamic bank’s unrestricted PSIAs.



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### CA-A.3 Capital Adequacy Ratio (continued)

- CA-A.3.8 In measuring credit risk for the purpose of capital adequacy, banks must apply the standardised approach through which claims of different categories of counterparties are assigned risk weights (RWs) according to broad categories of relative riskiness.
- CA-A.3.9 For the measurement of their operational risks, banks have a choice, subject to the written approval of the CBB, between two broad methodologies.
- (a) One alternative is to measure the risks using a basic indicator approach, applying the measurement framework described in chapter CA-6 of these regulations.
  - (b) The second methodology (i.e. the standardised approach) is set out in detail in chapter CA-6 including the procedure for obtaining the CBB's approval. This methodology is subject to the fulfilment of certain conditions. The use of this methodology is, therefore, conditional upon the explicit approval of the CBB.
- CA-A.3.10 In measuring market risk for the purpose of capital adequacy, banks must apply the approach set out in relevant sections.
- CA-A.3.11 If an Islamic bank wants to adopt an advanced approach (IRB for credit risk and/or IMA for market risk), it will need to apply to the CBB for prior approval.



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## **CA-A.4 Module history**

CA-A.4.1 This Module was first issued in January 2005 as part of the Islamic principles volume. Any material changes that have subsequently been made to this Module are annotated with the calendar quarter date in which the change was made. Chapter UG 3 provides further details on Rulebook maintenance and version control.

CA-A.4.2 A list of most recent changes made to this Module are detailed in the table below:

### ***Summary of changes***

Module Ref.	Change Date	Description of Changes
CA-A.2	10/2007	New Rule CA-A.2.5 introduced, categorising this Module as a Directive.
CA-1 to CA-6	01/2008	Basel II implementation.
CA-1.5	01/2008	Review of PIR by external auditors
CA-4.6	04/2008	Recognition of IIRA as ECAI and mapping of ratings
CA-4.2.15-18	01/2009	New guidance and rules on SMEs

### ***Evolution of the Module***

CA-A.4.3 Prior to the development of this Rulebook, the CBB issued various circulars representing regulations relating to capital adequacy requirements. These circulars were consolidated into this Module and are listed below:

Circular Ref.	Date of Issue	Module Ref.	Circular Subject
OG/78/01	20 Feb 2001	CA-A.3 and CA-1.4	Monitoring of Capital Adequacy
BC/01/98	10 Jan 1998	CA-A.3 and CA-1.4	Capital Adequacy Ratio

### ***Effective date***

CA-A.4.4 The contents retained from the previous module (Capital Adequacy-Islamic banks) are effective from the date depicted in the above circulars from which the requirements are compiled. The updated module is effective from January 01, 2008.





<b>MODULE</b>	<b>CA: Capital Adequacy</b>
<b>CHAPTER</b>	<b>CA-1 Scope and coverage of capital charges</b>

## **CA-1.1 Application**

**CA-1.1.1 All locally incorporated banks are required to measure and apply capital charges with respect to their credit, operational, market risk fiduciary and displacement risk, capital requirements.**

CA-1.1.2 Credit risk is defined as the potential that a bank's counterparty will fail to meet its obligations in accordance with agreed terms. Credit risk exists throughout the activities of a bank in the banking book and in the trading book including both on- and off-balance-sheet exposures.

CA-1.1.3 Operational risk is defined as the risk of losses resulting from inadequate or failed internal processes, people and systems or from external events, which includes but is not limited to, legal risk and Sharia compliance risk. This definition excludes strategic and reputational risks.

CA-1.1.4 Market risk is defined as the risk of losses in on- or off-balance-sheet positions arising from movements in market prices. The risks subject to the capital requirement of this module are:

- (a) the risks pertaining to equities in the trading book;
- (b) foreign exchange risk throughout the bank; and
- (c) commodity risk throughout the bank.

CA-1.1.5 The CBB has adopted the IFSB definitions of fiduciary and displacement risk for the purpose of this volume.

CA-1.1.6 Banks must compute capital charges for own funds as well as those of the unrestricted PSIAs. For the purpose of computing the Capital Adequacy Ratio, 30% of the bank's risk weighted assets relating to the unrestricted PSIAs must be included in accordance with the IFSB guidelines.



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CHAPTER	CA-1	Scope and coverage of capital charges

## CA-1.2 Monitoring of risks

CA-1.2.1 Banks are required to manage their risks, especially market risks, in such a way that the capital requirements are being met on a continuous basis i.e. at the close of each business day and not merely at the end of each calendar quarter. Banks are also required to maintain strict risk management systems to ensure that their intra-day exposures are not excessive.

CA-1.2.2 Banks' daily compliance with the capital requirements for credit and market risks must be verified by an independent risk management department and internal audit. It is expected that external auditors will perform appropriate tests of the bank's daily compliance with the capital requirements for credit and market risks. Where a bank fails to meet the minimum capital requirements for credit and market risk on any business day, the CBB must be informed in writing by no later than the following business day. The CBB will then seek to ensure that the bank takes immediate measures to rectify the situation.



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**CA-1.3 Investments in other entities and consolidation**

**CA-1.3.1** The banks must also apply the rules set in the Prudential Consolidation and Deduction Requirements Module where the bank has investments in other entities.

**CA-1.3.2** These capital adequacy regulations must be applied on a worldwide consolidated basis as well as on a solo basis. Guidance on consolidation and related matters is provided in the Prudential Consolidation and Deduction Requirements Module.



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#### **CA-1.4 Reporting**

**CA-1.4.1** Formal reporting, to the CBB, of capital adequacy must be made in accordance with the requirements set out under section BR 3.1.

**CA-1.4.2** Where a bank's CAR falls below its individual target ratio either on a solo basis (or on a consolidated basis), the General Manager of the bank must notify the CBB by the following business day, however no formal action plan will be necessary. The General Manager must explain what measures are being implemented to ensure that the bank will remain above its minimum target CAR(s).

**CA-1.4.3** The bank will be required to submit form PIRI to the CBB on a monthly basis, until the concerned CAR exceeds its target ratio.

**CA-1.4.4** The CBB will notify banks in writing of any action required of them with regard to the corrective and preventive action (as appropriate) proposed by the bank pursuant to the above, as well as of any other requirement of the CBB in any particular case.

**CA-1.4.5** All locally incorporated banks must provide the CBB, with immediate written notification (i.e. by no later than the following business day) of any actual breach of the minimum trigger CAR of 8%. Where such notification is given, the bank must also provide the CBB:

- (a) no later than one calendar week after the notification, with a written action plan setting out how the bank proposes to restore the relevant CAR(s) to the required minimum level(s) set out above and, further, describing how the bank will ensure that a breach of such CAR(s) will not occur again in the future; and
- (b) report on a weekly basis thereafter on the bank's relevant CAR(s) until such CAR(s) have reached the required target level(s) described above.

**CA-1.4.6** Banks must note that the CBB considers the breach of CARs to be a very serious matter. Consequently, the CBB may (at its discretion) subject a bank which breaches its CAR(s) to a formal licensing reappraisal. Such reappraisal may be effected either through the CBB's own inspection function or through the use of Reporting Accountants, as appropriate. Following such appraisal, the CBB will notify the bank concerned in writing of its conclusions with regard to the continued licensing of the bank.

**CA-1.4.7** The CBB recommends that the bank's compliance officer support and cooperate with the CBB in the monitoring and reporting of the CARs and other regulatory reporting matters. Compliance officers should ensure that their banks have adequate internal systems and controls to comply with these regulations.



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## **CA-1.5      Review of Prudential Information Returns by External Auditors**

CA-1.5.1      The CBB requires all relevant banks to request their external auditors to conduct a review of the prudential returns on a quarterly basis in accordance with the requirements set out under section BR . However, if a bank provides prudential returns without any reservation from auditors for two consecutive quarters, it can apply for exemption from such review for a period to be decided by CBB.



<b>MODULE</b>	<b>CA: Capital Adequacy</b>
<b>CHAPTER</b>	<b>CA-2 Regulatory Capital</b>

## **CA-2.1 Regulatory capital**

**CA-2.1.1** Islamic banks are allowed two types of own funds to meet their capital requirements for credit risk, market risk and operational risk as set out below:

**Tier 1: Core capital – Supports the calculation of credit risk weighted assets, operational risk and market risk.**

**Tier 2: Supplementary capital – Supports credit risk, operational risk and market risk subject to limitations.**

**CA-2.1.2** For the purpose of defining Tier capital, the CBB has broadly adopted the recommendations contained in IFSB's guidelines. However, some restrictions have been placed on the inclusion of profit equalisation and investment risk reserve as Tier 2 capital. For components of Tier 1 and Tier 2 capital refer to paragraphs CA-2.1.3 to CA-2.1.4.

### ***Tier 1: Core capital***

**CA-2.1.3** Tier 1 capital shall consist of the sum of items (a) to (e) below, less the sum of items (f) through (j) below:

**(a) Issued and fully paid ordinary shares;**

For Islamic funds with participation and / or “B” class shares (not carrying voting rights), the treatment for the purpose of these regulations must be agreed with the CBB. The CBB will consider each case on its merit.

**(b) Disclosed reserves**

- General reserves
- Legal / statutory reserves
- Share premium
- Capital redemption reserves
- Excluding fair value reserves<sup>1</sup>

**(c) Retained profit brought forward;**

**(d) Unrealized net gains arising from fair valuing equities<sup>2</sup>; and**

<sup>1</sup> This refers to unrealised fair value gains reported directly in equity (such gross gains are included in Tier 2).

<sup>2</sup> This refers to unrealised net fair value gains taken through P&L (which have been audited). Please note that the unrealised net gains related to unlisted equities taken through P&L arising on or after January 1, 2008 will be subject to 55% discount as stated in CA-2.1.4(c)ii.



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## CA-2.1 Regulatory capital (continued)

- (e) Minority interests in subsidiaries Tier 1 equity, arising on consolidation, in the equity of subsidiaries that are less than wholly owned. Further guidance on minority interests is provided in the Prudential Consolidation and Deduction Requirements Module.

### LESS:

- (f) Goodwill;
- (g) Current interim cumulative net losses;
- (h) Unrealized gross losses arising from fair valuing equity securities<sup>3</sup>;
- (i) Other deductions made on a pro-rata basis between Tier 1 and Tier 2;
- (j) Reciprocal cross holdings of other banks' capital.

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<sup>3</sup> This refers to both 'net losses taken through P&L' and 'gross losses reported directly in equity'.



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## CA-2.1 Regulatory capital (continued)

### *Tier 2: Supplementary capital*

#### CA-2.1.4 Tier 2 capital shall consist of the following items:

- (a) Current interim retained profits that have been reviewed as per the IAS by the external auditors.
- (b) Asset revaluation reserves, which arise from the revaluation of fixed assets and real estate from time to time in line with the change in market values, and are reflected on the face of the balance sheet as a revaluation reserve. Similarly, gains may also arise from revaluation of Investment Properties (real estate). These reserves (including the net gains on investment properties) may be included in Tier 2 capital, with the concurrence of the external auditors, provided that the assets are prudently valued, fully reflecting the possibility of price and forced sale. A discount of 55% will be applied to the difference between the historical cost book value and the market value to reflect the potential volatility of this form of unrealised capital.
- (c) Unrealised gains arising from fair valuing equities:
  - i. For unrealized gross gains reported directly in equity, a discount factor of 55% will be applied before inclusion in Tier 2 capital. Note for gross losses, the whole amount of such unrealised loss should be deducted from the Tier 1 capital.
  - ii. For unrealized net gains reported in income, a discount factor of 55% will apply on any such unrealized net gains from unlisted equity instruments before inclusion in Tier 1 capital (for audited gains) or Tier 2 capital (for reviewed gains) as appropriate. This discount factor will be applied to the incremental net gains related to unlisted equities arising on or after January 1, 2008.





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<b>CHAPTER</b>	<b>CA-2 Regulatory Capital</b>

### **CA-2.1 Regulatory capital (continued)**

- (d) Banks should note that the Central bank will discuss the applicability of the discount factor under paragraph (c) above with individual banks. This discount factor relating to CA-2.1.4(c)ii may be reassessed by the CBB if the bank arranges an independent review (which has been performed for the bank's systems and controls relating to FV gains on financial instruments) and meets all the requirements of the paper 'Supervisory guidance on the use of the fair value option for financial instruments by banks' issued by Basel Committee on Banking Supervision in June 2006.
- (e) Profit equalisation reserve and investment risk reserve, up to a maximum amount equal to the capital charge pertaining to 30% of the risk weighted assets financed by unrestricted investment account holders.



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**CA-2.2 Limits on the use of different forms of capital**

**CA-2.2.1** Tier 1 capital should represent at least half of the total eligible capital, i.e., Tier 2 capital is limited to the 100% of Tier 1 capital.

**CA-2.2.2** The limit on Tier 2 capital is based on the amount of Tier 1 capital after all deductions of investments pursuant to Prudential Consolidation and Deduction Requirements Module (see Appendix PCD-2 of PCD module for an example of the deduction effects and the caps).



<b>MODULE</b>	<b>CA:</b>	<b>Capital Adequacy</b>
<b>CHAPTER</b>	<b>CA-3:</b>	<b>The Banking Book - Minimum Capital Requirements for Islamic Financing Assets</b>

## **CA-3.1 Background**

- CA-3.1.1 Due to the nature of Islamic banking transactions, Islamic banks, as opposed to their conventional counterparts, are additionally exposed to price risk in their banking book. CBB recognizes that such risks need to be identified and measured for regulatory capital purposes.
- CA-3.1.2 Sections CA-3.2 to CA-3.8 describe the minimum capital requirements for the treatment of exposures, taking into account both credit and market risks including price risk within the banking book for each of the seven classes of Islamic financing assets.



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<b>CHAPTER</b>	<b>CA-3:</b>	<b>The Banking Book - Minimum Capital Requirements for Islamic Financing Assets</b>

## CA-3.2 Murabahah and Murabahah to the Purchase Orderer

### *Introduction*

- CA-3.2.1 This section sets out the minimum capital adequacy requirements to cover the transactions that are based on the Sharia rules and principles of Murabahah and Murabahah to the Purchase Orderer (MPO).
- CA-3.2.2 In Murabahah and MPO, the capital adequacy requirement for credit risk refers to the risk of a counterparty not paying the agreed price of an asset to the bank. In the case of binding MPOs, the risks faced by the Islamic banks are different at the various stages of the contract.
- CA-3.2.3 This section is broadly divided into (a) Murabahah and non-binding MPO and (b) binding MPO, as the types of risk faced by the bank are different at the various stages of the contract for the two categories.
- CA-3.2.4 This classification and the distinctions between a non-binding MPO and a binding MPO are subject to the criteria and opinions set by the respective SSB of the bank or any other SSB as specified by the CBB.
- CA-3.2.5 A Murabahah contract refers to an agreement whereby the bank sells to a customer at acquisition cost (purchase price plus other direct costs) plus an agreed profit margin, a specified kind of asset that is already in its possession. An MPO contract refers to an agreement whereby the bank sells to a customer at cost (as above) plus an agreed profit margin, a specified kind of asset that has been purchased and acquired by the bank based on a Promise to Purchase (PP) by the customer which can be a binding or non-binding PP.

### **Murabahah and Non-binding MPO**

- CA-3.2.6 In a Murabahah transaction, the bank sells an asset that is already available in its possession, whereas in a MPO transaction the bank acquires an asset in anticipation that the asset will be purchased by the orderer/customer.



<b>MODULE</b>	<b>CA: Capital Adequacy</b>
<b>CHAPTER</b>	<b>CA-3: The Banking Book - Minimum Capital Requirements for Islamic Financing Assets</b>

## **CA-3.2 Murabahah and Murabahah to the Purchase Orderer (continued)**

**CA-3.2.7** This price risk in Murabahah contracts ceases and is replaced by credit risk for the amount receivable from the customer following delivery of the asset. Likewise, in a non-binding MPO transaction, the bank is exposed to credit risk on the amount receivable from the customer when the latter accepts delivery and assumes ownership of the asset.

### **Binding MPO**

**CA-3.2.8** In a binding MPO, the bank has no 'long' position in the asset that is the subject of the transaction, as there is a binding obligation on the customer to take delivery of the asset at a pre-determined price. The bank is exposed to counterparty risk in the event that the orderer in a binding MPO does not honour his/her obligations under the PP, resulting in the bank selling the asset to a third party at a selling price which may be lower than the cost to the bank. The risk of selling at a loss is mitigated by securing a Hamish Jiddiyyah (HJ) (a security deposit held as collateral upon entering into agreement to purchase or agreement to lease) upon executing the PP with the customer, as commonly practised in the case of binding MPO.

### **Collateralisation**

**CA-3.2.9** As one of the CRM techniques, the bank can secure a pledge of the sold asset/underlying asset or another tangible asset ("collateralised Murabahah"). The collateralisation is not automatically provided in a Murabahah contract but must be explicitly stated or must be documented in a separate security agreement at or before the time of signing of the Murabahah contract. The bank may employ other techniques such as pledge of deposits or a third party financial guarantee. The RW of a financial guarantor can be substituted for the RW of the purchaser provided that the guarantor has a better credit rating than the purchaser and that the guarantee is legally enforceable.

**CA-3.2.10** In financing transactions that are collateralised, the pricing of the Murabahah assets and determination of the required amount of HJ would normally take into consideration the market value and forced-sale value of the assets; and the CRM would take into account of any 'haircut' applicable to the collateralised assets (if these assets are eligible collateral or acceptable to the Central Bank). Thus, fluctuations in the market value and forced sale value of the collateralised assets are dealt with under credit risk assessment. For full details of CRM techniques, and the eligibility of collateral, refer to **Section CA-4.7**.



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CHAPTER	CA-3:	The Banking Book - Minimum Capital Requirements for Islamic Financing Assets

## CA-3.2 Murabahah and Murabahah to the Purchase Orderer (continued)

### *Credit Risk*

#### Murabahah and Non-binding MPO

CA-3.2.11 The credit exposure must be measured based on accounts receivable in Murabahah (the term used herein includes MPO), which is recorded at their cash equivalent value i.e. amount due from the customers at the end of the reporting quarter less any provision for doubtful debts.

CA-3.2.12 The accounts receivable (net of specific provisions) amount arising from the selling of a Murabahah asset must be assigned a RW based on the credit standing of the obligor (purchaser or guarantor) as rated by an ECAI that is approved by the CBB. In case the obligor is unrated, a RW of 100% shall apply. (See Section CA-4.2).

#### Binding MPO

CA-3.2.13 In a binding MPO, the bank is exposed to default on the purchase orderer's obligation to pay fully for the asset at the agreed price. In the event of the orderer defaulting on its PP, the bank will dispose of the asset to a third party. The bank will have recourse to any HJ paid by the orderer, and (a) may have a right to recoup from the orderer any loss on disposing of the asset, after taking account of the HJ or (b) may have no such legal rights. In both cases, this risk is mitigated by the asset in possession as well as any HJ paid by the purchase orderer.

CA-3.2.14 In case (a) the bank has the right to recoup any loss (as indicated in the previous paragraph) from the orderer, that right constitutes a claim receivable which is exposed to credit risk, and the exposure shall be measured as the amount of the asset's total acquisition cost to the bank, (less the market value of the asset as collateral subject to any haircut, and less the amount of any HJ, provided that the collateral is an eligible collateral or has been agreed as acceptable to the CBB). The applicable RW must be based on the standing of the obligor as rated by an ECAI that is approved by the CBB, and in the case the obligor is unrated, a RW of 100% shall apply. (See Section CA-4.2).



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### **CA-3.2 Murabahah and Murabahah to the Purchase Orderer (continued)**

CA-3.2.15 In case (b) the bank has no such right, and the cost of the asset to the bank constitutes a market risk (as in the case on a non-binding MPO), but this market risk exposure is reduced by the amount of any HJ that the bank has the right to retain.

CA-3.2.16 In applying the treatment as set out in paragraph CA-3.2.14, the bank should ensure that the PP is properly documented and is legally enforceable.

**CA-3.2.17 Upon selling the asset, the accounts receivable (net of specific provisions) amount must be assigned a RW based on the credit standing of the obligor as rated by an ECAI that is approved by the CBB. In case the obligor is unrated, a RW of 100% shall apply. (See Section CA-4.2).**

#### **Exclusions**

CA-3.2.18 The capital requirement is to be calculated on the receivable amount, net of (i) specific provisions, (ii) any amount that is secured by eligible collateral (as defined in section CA-4.7) and/or (iii) any amount that is past due by more than 90 days. The portions that are collateralised and past due are subject to the treatment as set out in chapter CA-4.

#### **Assignment of Risk Weights**

CA-3.2.19 Islamic financing assets are to be categorized as per the claim categories detailed in section CA-4.2, and risk weighted accordingly. Banks should ensure that the appropriate risk weight is used based on the claim category for each transaction.

#### ***Market Risk***

#### **Murabahah and Non-binding MPO**

**CA-3.2.20 In the case of an asset in possession for a Murabahah transaction and an asset acquired specifically for resale to a customer in a non-binding MPO transaction, the asset would be treated as inventory of the bank and will be subject to price risk as per section CA-5.2. This capital charge is also applicable to assets held by a bank for incomplete non-binding MPO transactions at the end of a financial period.**



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## **CA-3.2 Murabahah and Murabahah to the Purchase Orderer (continued)**

**CA-3.2.21** Assets in possession on a 'sale or return' basis (with such an option included in the contract) are treated as accounts receivable from the vendor and as such would be offset against the related accounts payable to the vendor. If these accounts payable have been settled, the assets shall attract a RW based on rating of the vendor (100% in case of unrated), subject to (a) the availability of documentation evidencing such an arrangement with the vendor, and (b) the period for returning the assets to the vendor not having been exceeded. If the above conditions are not satisfied, capital charge will be provided as per paragraph CA-3.2.20.

### **Binding MPO**

**CA-3.2.22** In a binding MPO the orderer has the obligation to purchase the asset at the agreed price, and the bank as the seller is only exposed to credit risk as indicated in paragraph CA-3.1.13 above.

### **Foreign Exchange Risk**

**CA-3.2.23** If the funding of an asset purchase or the selling of an asset opens a bank to foreign exchange exposures, the relevant positions should be included in the measurement of foreign exchange risk described in **section CA-5.5**.

### ***Summary of Capital Requirement at Various Stages of the Contract***

**CA-3.2.24** The following table sets out the applicable period of the contract that attracts capital charges:





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## **CA-3.2 Murabahah and Murabahah to the Purchase Orderer (continued)**

### **a) Murabahah and Non-binding MPO**

<b>Applicable Stage of the Contract</b>	<b>Credit RW</b>	<b>Market Risk Capital Charge</b>
Asset available for sale (asset on balance sheet)*	Not applicable	Price risk (15% Capital charge)
Asset is sold and delivered to a customer and the selling price (accounts receivable) is due from the customer.	Based on customer's rating or 100% RW for unrated customer (see paragraphs CA-3.2.11 and CA-3.2.12)	NA
Upon full settlement of the purchase price.	NA	NA

\* Also includes an asset which is in possession due to cancellation of PP by a non-binding MPO customer. Any HJ taken, if any, is not considered as eligible collateral and shall not be offset against the value of the asset.



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## **CA-3.2 Murabahah and Murabahah to the Purchase Orderer (continued)**

### **b) Binding MPO**

<b>Applicable Stage of the Contract</b>	<b>Credit RW</b>	<b>Market Risk Capital Charge</b>
Asset available for sale (asset on balance sheet)* - If the bank has legal right to recoup from the customer any loss on disposing of the asset	Asset acquisition cost less [market value of asset if eligible as collateral (net of any haircut**) plus any HJ] x applicable RW (see chapter CA-4)	NA
Asset available for sale (asset on balance sheet)* - If the bank has no legal right to recoup from the customer any loss on disposing of the asset	NA	Price risk 15% Capital charge minus HJ (if the bank has legal right to the HJ)
Asset is sold and delivered to a customer and the selling price (accounts receivable) is due from the customer.	Based on customer's rating or 100% RW for unrated customer (see section CA-4.2)	NA
Upon full settlement of the purchase price.	NA	NA

\* Also includes an asset which is in possession due to cancellation of PP by a customer.

\*\* Please refer to CRM section CA-4.7 for eligibility of collateral and application of haircuts.



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### **CA-3.3 Salam and parallel Salam**

#### ***Introduction***

- CA-3.3.1 This section sets out the minimum capital requirement to cover credit and market (price) risks arising from entering into contracts or transactions that are based on the Sharia rules and principles of Salam. The bank is exposed to the (a) credit (counterparty) risk of not receiving the purchased commodity after disbursing the purchase price to the seller, and (b) price risk that the bank incurs from the date of execution of a Salam contract, which is applicable throughout the period of the contract and beyond the maturity date of the contract as long as the commodity remains on the balance sheet of the bank.
- CA-3.3.2 This section is applicable to (a) Salam contracts that are executed without any Parallel Salam contracts and (b) Salam contracts that are backed by independently executed Parallel Salam contracts.
- CA-3.3.3 A Salam contract refers to an agreement to purchase, at a predetermined price, a specified kind of commodity<sup>4</sup> which is to be delivered on a specified future date in a specified quantity and quality. The bank as the buyer makes full payment of the purchase price upon execution of a Salam contract or within a subsequent period not exceeding two or three days as deemed permissible by its Sharia Supervisory Board (SSB).
- CA-3.3.4 In certain cases the bank may enter into a back-to-back contract (Parallel Salam) to sell a commodity with the same specification as the purchased commodity under a Salam contract to a party other than the original seller. The Parallel Salam allows the bank to sell the commodity for future delivery at a predetermined price (thus hedging the price risk on the original Salam contract) and protects the bank from having to take delivery of the commodity and warehousing it.
- CA-3.3.5 The non-delivery of the commodity by a Salam seller (i.e. counterparty risk) does not discharge the bank's obligations to deliver the commodity under a Parallel Salam contract, and thus exposes the bank to potential loss in obtaining the supply elsewhere.
- CA-3.3.6 The obligations of a bank under Salam and Parallel Salam are not inter-conditional or interdependent, which implies that there is no legal basis for offsetting credit exposures between the contracts.

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<sup>4</sup> A commodity is defined as a physical product which is and can be traded on a secondary market, e.g. agricultural products, minerals (including oil) and precious metals. The commodity may or may not be traded on an organised exchange.



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### **CA-3.3 Salam and parallel Salam (continued)**

CA-3.3.7 In the absence of a Parallel Salam contract, a bank may sell the subject-matter of the original Salam contract in the spot market upon receipt, or, alternatively, the bank may hold the commodity in anticipation of selling it at a higher price. In the latter case, the bank is exposed to price risk on its position in the commodity until the latter is sold.

#### ***Credit risk***

CA-3.3.8 The amount paid for the purchase of a commodity based on a Salam contract shall be assigned a RW based on the credit standing of the counterparties involved in the contracts as rated by an ECAI that is approved by the CBB. If a counterparty is unrated, a RW of 100% will apply. (See Section CA-4.2).

#### **Exclusions**

CA-3.3.9 The capital requirement is to be calculated on the amount paid, net of (i) specific provisions, (ii) any amount that is secured by eligible collateral (as defined in section CA-4.7) and/or (iii) any amount which is past due by more than 90 days. The portions that are collateralised and past due are subject to the treatment as set out in chapter CA-4.

#### **Applicable period**

CA-3.3.10 The credit RW will be applied from the date of the contract made between both parties until the maturity of the Salam contract, which is upon receipt of the purchased commodity. However, between the date of contract and disbursement of funds to the customer the exposure is a commitment (off-balance sheet) and a credit conversion factor (CCF) of 20% will be applied before applying the relevant RW.

#### **Offsetting arrangement between credit exposures of Salam and Parallel Salam**

CA-3.3.11 The credit exposure amount of a Salam contract is not to be offset against the exposure amount of a Parallel Salam contract, as an obligation under one contract does not discharge an obligation to perform under the other contract.



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### CA-3.3 Salam and parallel Salam (continued)

#### *Market risk*

CA-3.3.12 The price risk on the commodity exposure in Salam can be measured in two ways, either the maturity ladder approach in accordance with paragraphs CA-5.6.9 to CA-5.6.12 or price risk in accordance with paragraph CA-5.2.2.

CA-3.3.13 The long and short positions in a commodity, which are positions of Salam and Parallel Salam, may be offset under either approach for the purpose of calculating the net open positions provided that the positions are in the same group of commodities.

#### **Foreign exchange risk**

CA-3.3.14 If the funding of a commodity purchase or selling of a commodity leaves a bank open to foreign exchange exposures, the relevant positions should be included in the measures of foreign exchange risk described in section **CA-5.5**.

#### *Summary of Capital Requirement at Various Stages of the Contract*

CA-3.3.15 The following table sets out the applicable period of the contract that attracts capital charges:



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### CA-3.3 Salam and parallel Salam (continued)

#### a) Salam with Parallel Salam

<b>Applicable Stage of Contract</b>	<b>Credit RW</b>	<b>Market Risk Capital Charge</b>
Payment of purchase price by the bank of a Salam customer	Based on customer's rating or 100% RW for unrated customer.  No Netting of Salam exposures against parallel Salam exposures.  (See <b>section CA-4.2</b> )	Two approaches are available.  Maturity Ladder Approach (see paragraphs CA-5.6.9 to CA-5.6.12 of <b>chapter CA-5</b> )  Price risk (see CA-5.2.2 of <b>chapter CA-5</b> )
Receipt of the purchased commodity by the bank. Asset available for delivery to the customer. If the bank has legal right to recoup from the customer any loss on disposing of the asset	Based on customer's rating or 100% RW for unrated customer.  No Netting of Salam exposures against parallel Salam exposures.  (See <b>section CA-4.2</b> )	NA
Receipt of the purchased commodity by the bank. Asset available for delivery to the customer - If the bank has no legal right to recoup from the customer any loss on disposing of the asset	NA	Two approaches are available.  Maturity Ladder Approach (see paragraphs CA-5.6.9 to CA-5.6.12 of <b>chapter CA-5</b> )  Price risk (see paragraph CA-5.2.2 of <b>chapter CA-5</b> )
The purchased commodity is sold and delivered to the buyer and the amount is received.	NA	NA



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### CA-3.3 Salam and parallel Salam (continued)

#### b) Salam without Parallel Salam

Applicable Stage of Contract	Credit RW	Market Risk Capital Charge
Payment of purchase price by the bank of a Salam customer. At this stage of the contract, only one of credit or market risk is possible at the same time. To be prudent, higher of the two should be provided (not both).	The higher of the following (credit or market)  Based on customer's rating or 100% RW for unrated customer.  (See section CA-4.2)	Price risk <b>but without additional 3 %</b> . (see paragraph 5.2.2 of chapter CA-5)
Receipt of the purchased commodity by the bank	NA	Price risk <b>but without additional 3 %</b> . (see paragraph 5.2.2 of chapter CA-5)
The purchased commodity is sold and delivered to the buyer.	NA	NA



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## **CA-3.4 Istisna'a and parallel Istisna'a**

### ***Introduction***

- CA-3.4.1 This section sets out the minimum capital adequacy requirement to cover credit and market (price) risks arising from entering into contracts or transactions that are based on the Sharia rules and principles of Istisna'a.
- CA-3.4.2 Istisna'a and parallel Istisna'a contracts would attract a risk weighting as per the credit standing of the respective counterparties (See section CA-4.2).
- CA-3.4.3 An Istisna'a contract refers to an agreement to sell to or buy from a customer, a non-existent asset which is to be manufactured or built according to the ultimate buyer's specifications and is to be delivered on a specified future date at a predetermined selling price.
- CA-3.4.4 The bank, as the seller, has the option to manufacture or build the asset on its own or to engage the services of a party other than the Istisna'a ultimate buyer as supplier or subcontractor, by entering into a Parallel Istisna'a contract (please refer to paragraph CA-3.4.12).
- CA-3.4.5 The exposures under Istisna'a involve credit and market risks, as described below. Credit exposures arise once the work is billed to the customer, while market (price) exposures arise on unbilled work-in-process (WIP).
- CA-3.4.6 There is a capital requirement to cater for the credit (counterparty) risk of the bank not receiving the selling price of the asset from the customer or project sponsor either in pre-agreed stages of completion and/or upon full completion of the manufacturing or construction process.
- CA-3.4.7 This section also sets out the capital adequacy requirement to cater for the market risk that a bank incurs from the date of manufacturing or construction, which is applicable throughout the period of the contract on unbilled WIP inventory.
- CA-3.4.8 This section is applicable to both (a) Istisna'a contracts that are executed without a Parallel Istisna'a contract and (b) Istisna'a contracts that are backed by independently executed Parallel Istisna'a contracts.





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## **CA-3.4 Istisna'a and parallel Istisna'a (continued)**

CA-3.4.9 This section makes distinctions between the two main categories of Istisna'a:

(a) Full Recourse Istisna'a

The receipt of the selling price by the bank is dependent on the financial strength or payment capability of the customer for the subject matter of Istisna'a, where the source of payment is derived from the various other commercial activities of the customer and is not solely dependent on the cash flows from the underlying asset/project; and

(b) Limited and Non-recourse Istisna'a

The receipt of the selling price by the bank is dependent partially or primarily on the amount of revenue generated by the asset being manufactured or constructed by selling its output or services to contractual or potential third party buyers. This form of Istisna'a faces "revenue risk" arising from the asset's ability to generate cash flows, instead of the creditworthiness of the customer or project sponsor.

CA-3.4.10 In full, limited and non-recourse Istisna'a contracts, the bank assumes the completion risk that is associated with the failure to complete the project at all, delay in completion, cost overruns, occurrence of a force majeure event and unavailability of qualified personnel and reliable seller(s) or subcontractors in a Parallel Istisna'a.

CA-3.4.11 The selling price of an asset sold based on Istisna'a is agreed or determined on the contractual date and such a contract is binding. The price cannot be increased or decreased on account of an increase or decrease in commodity prices or labour cost. The price can be changed subject to the mutual consent of the contracting parties due to alteration or modifications to the contract or unforeseen contingencies, which is a matter for the commercial decision of the bank and can result in a lower profit margin.

CA-3.4.12 In cases where a bank enters into Parallel Istisna'a to procure an asset from a party other than the original Istisna'a customer (buyer), the price risk relating to input materials is mitigated. The bank remains exposed to the counterparty risk of the Parallel Istisna'a seller in delivering the asset on time and in accordance with the Istisna'a ultimate buyer's specifications. This is the risk of not being able to recover damages from the Parallel Istisna'a seller for the losses resulting from the breach of contract.



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## **CA-3.4 Istisna'a and parallel Istisna'a (continued)**

CA-3.4.13 The failure of the Parallel Istisna'a seller to deliver a completed asset which meets the buyer's specifications does not discharge the bank's obligations to deliver the asset ordered under an Istisna'a contract, and thus exposes the bank to potential loss in making good the shortcomings or obtaining the supply elsewhere. The obligations of a bank under Istisna'a and Parallel Istisna'a contracts are not inter-conditional or interdependent, which implies that there is no legal basis for offsetting credit exposures between the contracts.

### ***Credit Risk***

#### **Full Recourse Istisna'a**

CA-3.4.14 The receivable amount generated from the selling of an asset based on an Istisna'a contract with full recourse to the customer (buyer) shall be assigned a RW based on the credit standing of the customer as rated by an ECAI that is approved by the CBB. In case the buyer is unrated, a RW of 100% shall apply. (See section CA-4.2).

#### **Limited and Non-Recourse Istisna'a**

CA-3.4.15 When the project is rated by an ECAI, the RW based on the credit rating of the project is applied to calculate the capital adequacy requirement. Otherwise, the RW shall be based on the 'Supervisory Slotting Criteria' approach for Specialised Financing (Project Finance) as set out in section CA-4.3.

CA-3.4.16 In cases where a group of contractors are engaged in a particular project, the risk rating or weightage will follow the obligations of various contractors. If the risk is undertaken by a main contractor, the risk rating of the main contractor is to be used.

CA-3.4.17 The limited and non-recourse Istisna'a financing structure is required to meet the characteristics as set out below in order to qualify for the treatment mentioned in paragraph CA-3.4.15 above:



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#### **CA-3.4 Istisna'a and parallel Istisna'a (continued)**

- (a) the segregation of the project's liabilities from the balance sheet of the Istisna'a ultimate buyer (or project sponsor) from a commercial and accounting perspective which is generally achieved by having the Istisna'a contract made with a special purpose entity set up to acquire and operate the asset/project concerned;
- (b) The ultimate buyer is dependent on the income received from the assets acquired/ projects to pay the purchase price;
- (c) The contractual obligations give the manufacturer/constructor/bank a substantial degree of control over the asset and the income it generates, for example under BOT (built, operate and transfer) arrangement where the manufacturer builds a highway and collects tolls for a specified period as a consideration for the selling price; and
- (d) The primary source of repayment is the income generated by the asset/project rather than relying on the capacity of the buyer.

CA-3.4.18 Please Note: Insurance is normally part and parcel of the project risk financing. However, it is not regarded as a credit risk mitigating technique.

##### **Exclusions**

CA-3.4.19 The capital requirement is to be calculated on the receivable amount, net of (i) specific provisions, (ii) any amount that is secured by eligible collateral (as defined in section CA-4.7) and/or (iii) any amount which is past due by more than 90 days. The portions that are collateralised and past due are subject to the treatment as set out in chapter CA-4.

CA-3.4.20 Any portion of an Istisna'a contract that is covered by an advanced payment shall carry a RW of 0%, or the amount of the advanced payment shall be offset against the total amount receivable or amounts owing from progress billings.

##### **Applicable period**

CA-3.4.21 The credit RW is to be applied from the date when the manufacturing or construction process commences and until the selling price is fully settled by the bank, either in stages and/or on the maturity of the Istisna'a contract, which is upon delivery of the manufactured asset to the Istisna'a ultimate buyer.



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## **CA-3.4 Istisna'a and parallel Istisna'a (continued)**

### **Offsetting Arrangement between Credit Exposures of Istisna'a and Parallel Istisna'a**

CA-3.4.22 The credit exposure amount of an Istisna'a contract is not to be offset against the credit exposure amount of a Parallel Istisna'a contract because an obligation under one contract does not discharge an obligation to perform under the other contract.

#### ***Market Risk***

#### **Full Recourse Istisna'a**

##### **(a) Istisna'a with Parallel Istisna'a**

CA-3.4.23 There is no capital charge for market risk to be applied in addition to provisions in paragraphs CA-3.4.14 to CA-3.4.22 above, subject to there being no provisions in the Parallel Istisna'a contract that allow the seller to increase or vary its selling price to the bank, under unusual circumstances. Any variations in a Parallel Istisna'a contract that are reflected in the corresponding Istisna'a contract which effectively transfers the whole of the price risk to an Istisna'a customer (buyer), is also eligible for this treatment.

CA-3.4.24 However, if the seller is allowed to vary the selling price of the asset, then under the price risk will be calculated in accordance with paragraph CA-5.2.2 of **chapter CA-5**.

##### **(b) Istisna'a without Parallel Istisna'a**

CA-3.4.25 A capital charge of 1.6% (equivalent to a 20% RW) is to be applied to the balance of unbilled WIP inventory to cater for market risk, in addition to the credit RW stated in paragraphs CA-3.4.14 to CA-3.4.22 above.

CA-3.4.26 This inventory is held subject to the binding order of the Istisna'a buyer and is exposed to the price risk as described in CA-3.4.11.

#### **Foreign exchange risk**

CA-3.4.27 Any foreign exchange exposures arising from the purchasing of input materials, or from Parallel Istisna'a contracts made, or the selling of a completed asset in foreign currency should be included in the measures of foreign exchange risk described in **section CA-5.5**.



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### CA-3.4 Istisna'a and parallel Istisna'a (continued)

#### *Summary of Capital Requirement at Various Stages of the Contract*

CA-3.4.28 The following tables set out the applicable period of the contract that attracts capital charges for (a) Full Recourse Istisna'a (b) Limited and Non-Recourse Istisna'a.

(a) Full Recourse Istisna'a

(i) Istisna'a with Parallel Istisna'a

<b>Applicable Stage of the Contract</b>	<b>Credit RW</b>	<b>Market Risk Capital Charge</b>
Unbilled work-in-progress	Based on ultimate buyer's rating or 100% RW for unrated buyer.	Nil provided that there is no provision in the Parallel Istisna'a contract that allows the seller to increase or vary the selling price. See paragraph CA-3.4.23 If the seller is allowed to vary the selling price of the asset, then under the market risk treatment 15% capital charge on net long or short position plus 3% capital charge on gross positions.
Amount receivable after contract billings	No netting of Istisna'a exposures against Parallel Istisna'a exposures.  (See paragraphs CA-3.4.14 to CA-3.4.22)  (See section CA-4.2)	
Upon full settlement price by an Istisna'a buyer.	NA	NA



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### CA-3.4 Istisna'a and parallel Istisna'a (continued)

(ii) Istisna'a without Parallel Istisna'a

<b>Applicable Stage of the Contract</b>	<b>Credit RW</b>	<b>Market Risk Capital Charge</b>
Unbilled work-in-progress	Based on ultimate buyer's rating or 100% RW for unrated buyer.	1.6% capital charge on work in progress inventory.  See relevant paragraphs under CA-3.4.25 to CA-3.4.26
Progress billing to customer.	Based on ultimate buyer's rating or 100% RW for unrated buyer.  (See paragraphs CA-3.4.14 to CA-3.4.22) (See section CA-4.2)	NA
Upon full settlement price by and Istisna'a buyer.	NA	NA



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### **CA-3.4 Istisna'a and parallel Istisna'a (continued)**

(b) Limited and Non-Recourse Istisna'a

Istisna'a with Parallel Istisna'a (for project finance)

<b>Applicable Stage of the Contract</b>	<b>Credit RW</b>	<b>Market Risk Capital Charge</b>
Unbilled work-in-progress	Based on project's ECAI rating if available or supervisory slotting criteria that ranges from 70% to 250% RW.  No netting of Istisna'a exposures against Parallel Istisna'a exposures.  (See sections CA-4.2 and CA-4.3)	NA
Amount receivable after contract billings		NA
Upon full settlement price by and Istisna'a buyer.	NA	NA



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## **CA-3.5 Ijarah and Ijarah Muntahia Bittamleek**

### ***Introduction***

- CA-3.5.1 This section sets out the minimum capital requirement to cover counterparty risk and residual value risk of leased assets, arising from a bank entering into contracts or transactions that are based on the Sharia rules and principles of Ijarah and Ijarah Muntahia Bittamleek (IMB), also known as Ijarah wa Iqtinā. The section also covers the market (price) risk of assets acquired for Ijarah and IMB.
- CA-3.5.2 In an Ijarah contract (either operating or IMB), the bank as the lessor maintains its ownership in the leased asset whilst transferring the right to use the asset, or usufruct, to an enterprise as the lessee, for an agreed period at an agreed consideration. All liabilities and risks pertaining to the leased asset are to be borne by the bank including obligations to restore any impairment and damage to the leased asset arising from wear and tear and natural causes which are not due to the lessee's misconduct or negligence.
- CA-3.5.3 Thus, in both Ijarah and IMB, the risks and rewards remain with the lessor, except for the residual value risk at the term of an IMB which is borne by the lessee. The lessor is exposed to price risk on the asset while it is in the lessor's possession prior to the signature of the lease contract, except where the asset is acquired following a binding promise to lease as described in paragraph CA-3.5.5 below.
- CA-3.5.4 In an IMB contract, the lessor promises to transfer its ownership of the leased asset to the lessee at the end of the contract as a gift or as a sale at a specified consideration, provided that (a) the promise is separately expressed and independent of the underlying Ijarah; or (b) a gift contract is entered into conditional upon fulfilment of all the Ijarah obligations, and thereby ownership shall be automatically transferred thereupon.
- CA-3.5.5 In both operating Ijarah and IMB, the Bank either possesses the asset before entering into a leased contract or enters into the contract based on specific description of an asset to be leased and acquired in the future before it is delivered to the lessee. This agreement to lease may be considered as binding (binding Promise to Lease (PL)) or as non-binding (non-binding PL) depending on the applicable Sharia interpretations.





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## **CA-3.5 Ijarah and Ijarah Muntahia Bittamleek (continued)**

### **Operating Ijarah**

CA-3.5.6 This section sets out the minimum capital requirements to cater for the lessor's exposures to (a) the credit risk of the lessee as counterparty in servicing the lease rentals, and (b) the market (price) risk attaching to the residual value of the leased assets either at the end of the Ijarah contract or at the time of repossession upon default, i.e. the risk of losing money on the resale of the leased asset.

### **IMB**

CA-3.5.7 In IMB, once the lease contract is signed, the lessor is exposed to credit risk for the lease payments receivable from the lessee (a credit risk mitigated by the asset's value as collateral<sup>5</sup> in most cases) and to a type of operational risk in respect of the need to compensate the lessee if the asset is permanently impaired through no fault of the latter. If the leased asset is permanently impaired and is uninsured, the bank suffers a loss equal to the carrying value of the leased asset, just as it would if any of its fixed assets were permanently impaired. In the event that the lessee exercises its right to cancel the lease, the lessor is exposed to the residual value of the leased asset being less than the refund of payments due to the lessee. In such case, the price risk, if any, is already reflected in a 'haircut' to be applied to the value of the leased asset as collateral. Therefore, the price risk, if any, is not applicable in the context of the IMB.

CA-3.5.8 This section sets out the minimum capital adequacy requirement to cater for the credit risk of the lessee as counterparty with respect to servicing the lease rentals. The credit risk exposure in respect of the lease rentals is mitigated by the collateral represented by the value of the leased asset on repossession, provided that the bank is able to repossess the asset, which may be subject to doubt, especially in the case of movable assets or residential real estate. Insofar as there is doubt as to the lessor's ability to repossess the asset, the residual fair value of the asset that was assumed in fixing the lease rentals is also exposed to credit risk.

CA-3.5.9 The bank may be exposed to losses in case a lessee acquiring an asset under IMB decides not to continue with the contract. In such a case, the lessor is required to refund to the lessee the capital payments (instalments of the purchase price) that were included in the periodic lease rentals (subject to deduction of any amounts due for unpaid rentals). If the value of the repossessed asset is less than the amount to be refunded (before any such deduction), the difference constitutes a loss to the lessor. This exposes the bank as lessor to a form of market risk.

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<sup>5</sup> The collateral used in the context of IMB is of the usufruct or use value of the asset, as the bank is the owner of the asset.



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### CA-3.5 Ijarah and Ijarah Muntahia Bittamleek (continued)

CA-3.5.10 In theory, a situation could arise in which, when an IMB contract arrives at its term, the lessee decides not to exercise its option to complete the purchase by making the contractually agreed final payment (The option to purchase places no obligation on the lessee to do so.). The bank may thus be exposed to market risk, in respect of a potential loss from disposing of the asset for an amount lower than its net book value. Generally, however, the lessor's exposure in such a case would not be significant, as the option to purchase can be exercised by making a payment of a token amount and the lessee would have no reason to refrain from exercising it.

CA-3.5.11 Moreover, the net book value of the asset at the term of the IMB (i.e. its residual fair value as assumed in fixing the lease rentals) would be zero or close to zero.

#### *Credit Risk*

CA-3.5.12 In a binding PL, when a bank is exposed to default on the lease orderer's obligation to execute the lease contract, the exposure shall be measured as the amount of the asset's total acquisition cost to the bank, less the market value of the asset as collateral subject to any haircut, and less the amount of any unbundled received from the lease orderer. The applicable RW shall be based on the standing of the obligor as rated by an ECAI that is approved by the CBB, and in the case the obligor is unrated, a RW of 100% shall apply (refer to chapter CA-4). The bank may or may not have the right to recoup from the customer any loss on leasing or disposing of the asset after taking account of the HJ.

CA-3.5.13 In applying the treatment as set out in paragraph CA-3.5.12, the bank must ensure that the PL is properly documented and is legally enforceable. In the absence of proper documentation and legal enforceability, the asset is to be treated similarly to one in a non-binding PL which is exposed to market (price) risk, using the measurement approach as set out in paragraph CA-3.5.18(a).

#### *Operating Ijarah*

CA-3.5.14 When the lessee gets the right to use the asset, the lessor is exposed to credit risk for the estimated value of the lease payments in respect of the remaining period of the Ijarah. This exposure is mitigated by the market value of the leased asset (subject to the applicable haircut) which may be repossessed (except in the case of residential real estate). The net credit risk exposure shall be assigned a RW based on the credit standing of the lessee/counterparty as rated by an ECAI that is approved by the CBB. In the case that the lessee is unrated, a RW of 100% shall apply.



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### CA-3.5 Ijarah and Ijarah Muntahia Bittamleek (continued)

#### IMB

CA-3.5.15 When the lessee gets the right to use the asset, the capital requirement for IMB is based on the total estimated future ijarah receivable amount over the duration of the lease contract. This exposure is mitigated by the market value of the leased asset which may be repossessed (except in the case of residential real estate). The net credit risk exposure shall be assigned a RW based on the credit standing of the lessee/counterparty as rated by an ECAI that is approved by the CBB. In the case that the lessee is unrated, a RW of 100% shall apply. (See section CA-4.2).

CA-3.5.16 The estimated future ijarah receivable amount as indicated in paragraph CA-3.5.15 (a) above, shall be risk-weighted based on the credit standing of the lessee as rated by an ECAI or at 100%, after deduction of the value of the leased asset as collateral (subject to any haircut). (See chapter CA-4).

#### Exclusions

CA-3.5.17 The capital requirement is to be calculated on the receivable amount, net of (i) specific provisions, (ii) any amount that is secured by eligible collateral (as defined in section CA-4.7) and/or (iii) any amount which is past due by more than 90 days. The portions that are collateralised and past due are subject to the treatment as set out in chapter CA-4.

#### *Market Risk*

CA-3.5.18 In the case of an asset acquired and held for the purpose of either operating Ijarah or IMB, the capital charge to cater for market (price) risk in respect of the leased asset from its acquisition date until its disposal can be categorised into the following:

##### (a) Non-binding PL

The asset for leasing will be treated as inventory of the bank and capital charge will be provided for the price risk in accordance with section CA-5.2.



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## **CA-3.5 Ijarah and Ijarah Muntahia Bittamleek (continued)**

### **(b) Binding PL**

In a binding PL, a bank is exposed to default on the lease orderer's obligation to lease the asset in its possession. In the event of the lease orderer defaulting on its PL, the bank will either lease or dispose of the asset to a third party. The bank will have recourse to any HJ paid by the customer<sup>6</sup>, and (i) may have a right to recoup from the customer any loss on leasing or disposing of the asset after taking account of the HJ, or (ii) may have no such right, depending on the legal situation. In both cases, this risk is mitigated by the asset in possession (if eligible) as well as any HJ paid by the lease orderer.

CA-3.5.19 In case (i), the bank has the right to recoup any loss (as indicated in the previous paragraph) from the customer, that right constitutes a claim receivable which is exposed to credit risk, and the exposure shall be measured as the amount of the asset's total acquisition cost to the bank, less the market value of the asset as collateral subject to any haircut, and less the amount of any HJ. The applicable RW shall be based on the standing of the customer as rated by an ECAI that is approved by CBB, and in the case the obligor is unrated, a RW of 100% shall apply. (see section CA-4.2).

CA-3.5.20 In case (ii) the bank has no such right, and the cost of the asset to the bank constitutes a market risk (as in the case on a non-binding PL), but this market risk exposure is reduced by the amount of any HJ that the bank has the right to retain.

### **Operating Ijarah**

**CA-3.5.21 The residual value of the asset will be subject to capital charge of 8%. Upon expiry of the lease contract, the carrying value of the leased asset shall carry a capital charge for price risk in accordance with section CA-5.2 until the asset is re-leased or disposed of.**

### **IMB**

CA-3.5.22 In the event that the lessee exercises its right to cancel the lease, the lessor is exposed to the residual value of the leased asset being less than the refund of payments due to the lessee. In such a case, the price risk, if any, is already reflected in a 'haircut' to be applied to the value of the leased asset as collateral in credit risk. Therefore, the price risk, if any, is not applicable in the context of the IMB.

<sup>6</sup> The amount can only be deducted for damages, i.e. difference between the asset acquisition cost and the total of lease rentals (when the asset is leased to a third party) or selling price (when the asset is sold to a third party), whichever is applicable.



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### CA-3.5 Ijarah and Ijarah Muntahia Bittamleek (continued)

#### *Summary of Capital Requirement at Various Stages of the Contract*

CA-3.5.23 The following tables set out the applicable period of the contract that attracts capital charges:

##### Operating Ijarah

<b>Applicable Stage of the Contract</b>	<b>Credit RW</b>	<b>Market Risk Capital Charge</b>
Asset available for lease (prior to signing a lease contract) – If the bank has legal right to recoup from the customer any loss on disposing of the asset	Binding PL Asset acquisition cost less (a) market value of asset fulfilling function of collateral (net of any haircuts) and (b) any ‘hamish jiddiyyah’ multiply with the customer’s rating or 100% RW for unrated customer. (See section CA-4).	Non-binding PL 15% capital charge until lessee takes possession.
Asset available for lease (prior to signing a lease contract) – If the bank has no legal right to recoup from the customer any loss on disposing of the asset	NA	15% capital charge until lessee takes possession minus urbun (If the bank has legal right to it).
When the lessee gets the right to use the asset and the lease rental payments are due from the lessee	Total contractual obligation of the lease rental receivable over the duration of the lease contract less the recovery value* (if eligible) of the leased asset shall be risk-weighted according to the lessee’s rating. (100% RW for an unrated lessee.). (See chapter CA-4).	The residual value will be subject to capital charge of 8%
Maturity of contract term and the leased asset is returned to the bank	Not applicable	15% capital charge of the carrying value of the asset

\* Recovery value should be based on the entire Ijarah asset value.



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### CA-3.5 Ijarah and Ijarah Muntahia Bittamleek (continued)

IMB

Applicable Stage of the Contract	Credit RW	Market Risk Capital Charge
Asset available for lease (prior to signing a lease contract) – If the bank has legal right to recoup from the customer any loss on disposing of the asset	Binding PL Asset acquisition cost less (a) market value of asset fulfilling function of collateral (net of any haircuts) and (b) any 'hamish jiddiyyah' multiply with the customer's rating or 100% RW for unrated customer. (See chapter CA-4).	Non-binding PL 15% capital charge until lessee takes possession
Asset available for lease (prior to signing a lease contract) – If the bank has no legal right to recoup from the customer any loss on disposing of the asset	NA	15% capital charge until lessee takes possession minus urbun (If the bank has legal right to it).
When the lessee gets the right to use the asset and the lease rental payments are due from the lessee	Total contractual obligation of the lease rental receivable over the duration of the lease contract less recovery value of the asset* (if eligible) shall be risk-weighted according to the lessee's rating (100% RW for an unrated lessee. (See chapter CA-4).	Not applicable
Maturity of contract term and the leased asset is returned to the bank	Not applicable	Not applicable

\* Recovery value should be based on the entire Ijarah asset value.



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## **CA-3.6 Musharakah and Diminishing Musharakah**

### ***Introduction***

- CA-3.6.1 This section sets out the minimum capital adequacy requirement to cover the risk of loss on invested capital arising from entering into contracts or transactions that are based on the Sharia rules and principles of Musharakah and Diminishing Musharakah where the bank and their customers/partner(s) contribute to the capital of the partnership and shares its profit or loss.
- CA-3.6.2 This section is applicable to both (a) Musharakah in which all the partners' share remain constant throughout the contract period; and (b) Diminishing Musharakah in which the share of the bank shall be gradually reduced during the tenure of the contract until it is fully sold to the other partner(s).
- CA-3.6.3 Musharakah contracts refer to partnerships in specific transactions or projects. These exclude participation in the share capital (equity) of other enterprises.
- CA-3.6.4 A Musharakah is an agreement between the bank and a customer to contribute capital in various proportions to an enterprise, whether existing or new, or to ownership of a real estate or moveable asset, either on a permanent basis, or on a diminishing basis where the customer progressively buys out the share of the bank ("Diminishing Musharakah"). Profits generated by that enterprise or real estate/asset are shared in accordance with the terms of Musharakah agreement whilst losses are shared in proportion to the respective contributor's share of capital.
- CA-3.6.5 A bank may enter into a Musharakah contract with a customer as a means of providing a financing to the latter on a profit sharing and loss bearing basis. In this case, the Musharakah is normally of the diminishing type, in which the customer gradually purchases the bank's partnership share over the life of the contract. This type of financing is one of the Sharia compliant alternatives to avoid a conventional term loan repayable by instalments, and as such it is exposed to credit risk for the customer's purchase payments as well as to the risk attached to the bank's share of the underlying assets.





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## **CA-3.6 Musharakah and Diminishing Musharakah (continued)**

### **Musharakah**

CA-3.6.6 This section sets out the minimum capital adequacy requirement to cater for “capital impairment risk”, the risk of losing the amount contributed to an enterprise or ownership of an asset. The bank acts as a partner in a Musharakah contract and is exposed to the risk of losing its capital upon making payment of its share of capital in a Musharakah contract. A Musharakah can expose the bank either to capital impairment risk or to ‘credit risk’, depending on the structure and purpose of the Musharakah and the types of asset in which the funds are invested. The invested capital is redeemable either by liquidation of the Musharakah assets at the end of the contract which has a fixed tenure or as mutually agreed by the partners, or upon divestment of partnership in an on-going Musharakah subject to giving a notice to other partners. The amount of capital redemption is represented by the value of a share of capital, which is dependent on the quality of the underlying investments or assets, and ability to generate profits and cash flows from the Musharakah.

CA-3.6.7 As a partner to a Musharakah contract, the bank is not entitled to a fixed rate of return and is thus exposed to variable profits generated by the partnership which are shared on a basis as agreed in the Musharakah contract, whereas losses are to be borne by the bank and its partners according to their respective ratio of invested capital. Therefore, the bank is exposed to entrepreneurial risk of an active partner that manages the partnership and business risks associated with the underlying activities and types of investments or assets of the partnership.

### **Diminishing Musharakah**

CA-3.6.8 This form of Musharakah is a means whereby a bank can provide term finance to a client on a profit and loss sharing basis. The bank enters into this type of Musharakah with the objective of transferring the ownership to the partner/customer, where the bank acts as a joint-owner of the asset with a promise by the partner to purchase the bank’s share making a payment on one or more specified future dates. The bank’s selling price is normally based on the fair value of the partnership share being transferred on the date of each purchase, which may expose the bank to the risk of selling its share of ownership below the acquisition price.

CA-3.6.9 As a joint-owner, the bank is also entitled to its share of revenue generated from the assets of the Musharakah, such as Ijarah lease rentals in which the rental entitlements to the bank shall be adjusted periodically according to the bank’s share of ownership in the asset.





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### CA-3.6 Musharakah and Diminishing Musharakah (continued)

CA-3.6.10 The bank's position in a Diminishing Musharakah thus entails two kinds of exposure. The amounts due from the partner to purchase the agreed shares of the asset on the agreed dates are subject to credit risk in respect of the partner's ability and willingness to pay, with the shares of the partner in the asset providing credit risk mitigation as collateral. The capital invested by the bank is also subject to the risk that the amounts recoverable from the partner may be less than the amount invested because the value of the Musharakah assets has decreased (capital impairment risk).

#### *Equity position risk - Musharakah*

CA-3.6.11 Musharakah exposures, unless deducted for regulatory capital purposes according to the Prudential Consolidation and Deduction Requirements, will be treated as stated in paragraphs CA-3.6.12 to CA-3.6.14.

CA-3.6.12 Musharakah exposures in the nature of specialized financing will be risk-weighted as per the supervisory slotting criteria as detailed in section CA-4.3.

CA-3.6.13 Other Musharakah exposures will be risk-weighted using the risk weights applicable to equities as explained in section CA-4.2.

CA-3.6.14 If the bank demonstrates that a Musharakah exposure meets the definition of trading book given in chapter CA-5, capital charge will be calculated as per market risk rules detailed in chapter CA-5.

#### *Equity position risk – Diminishing Musharakah*

CA-3.6.15 The equity exposure in a Diminishing Musharakah contract, where the bank intends to transfer its full ownership in movable assets and working capital to the other partner over the life of the contract, is calculated based on the remaining balance of the amount invested (measured at historical cost including any share of undistributed profits) less any specific provision for impairment. The exposure shall be risk weighted according to the nature of the underlying assets as set out in paragraph CA-3.6.11 to CA-3.6.14 above. If a third party guarantee exists, to make good impairment losses, the RW of the guarantor shall be substituted for that of the assets (if lower) for the amount of any such guarantee.



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### CA-3.6 Musharakah and Diminishing Musharakah (continued)

#### *Summary of capital requirement at various stages of the contract*

CA-3.6.16 The following table sets out the Musharakah categories that attract capital charges:

Musharakah Category	Credit RW	Market Risk Capital Charge
Specialized financing	<u>Supervisory slotting criteria should be applied.</u>  Between 90-270% RW of the contributed amount* to the business venture based on the four categories.	NA
Other	150% RW** of the contributed amount to the business venture less any specific provisions (if there is a third party guarantee, the RW of the guarantor shall be substituted for that of the assets for the amount of any such guarantee, if lower).	NA
Musharakah meeting the definition of trading book		As set out in the applicable market risk section (Chapter CA-5).

\* In the case of Diminishing Musharakah, the contributed amount is based on the remaining balance of the invested amount.

\*\* 100% RW may be applied if the funds can be withdrawn by the bank at short notice of 5 working days.



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## **CA-3.7 Mudarabah**

### ***Introduction***

- CA-3.7.1 This section sets out the minimum capital adequacy requirement to cover the risk of losing invested capital arising from entering into contracts or transactions that are based on the Sharia rules and principles of Mudarabah where the bank assumes the role of capital provider. This section is applicable to both restricted and unrestricted Mudarabah financing.
- CA-3.7.2 A Mudarabah is an agreement between the bank and a customer whereby the bank would contribute capital to an enterprise or activity which is to be managed by the customer as the (labour provider or) Mudarib.
- CA-3.7.3 Profits generated by that enterprise or activity are shared in accordance with the terms of the Mudarabah agreement whilst losses are to be borne solely by the bank unless the losses are due to the Mudarib's misconduct, negligence or breach of contracted terms.
- CA-3.7.4 A Mudarabah financing can be carried out on either:
- (a) A restricted basis, where the capital provider allows the Mudarib to make investments subject to specified investment criteria or certain restrictions such as types of instrument, sector or country exposures.
  - (b) An unrestricted basis, where the capital provider allows the Mudarib to invest funds freely based on the latter's skills and expertise.
- CA-3.7.5 As the fund provider, the bank is exposed to the risk of losing its capital investment or 'capital impairment risk' upon making payment of the capital to the Mudarib. Any loss on the investment is to be borne solely by the capital provider, but is limited to the amount of his capital. Losses that are due to misconduct, negligence or breach of contractual terms, are to be borne by the Mudarib.
- CA-3.7.6 However, while it is not permissible for a Mudarib to give a guarantee against such losses, such a guarantee may be given by a third party on the basis of tabarru (donation). In such a case, the amount of the Mudarabah capital so guaranteed may be considered as subject to credit risk with a risk weighting equal to that of the guarantor.
- CA-3.7.7 In particular, such guarantees may be given when liquid funds are placed in an Islamic interbank market under a Mudarabah contract.



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### CA-3.7 Mudarabah (continued)

#### *Equity Position Risk*

- CA-3.7.8 Mudarabah exposures, unless deducted for regulatory capital purposes according to the Prudential Consolidation and Deduction Requirements, will be treated as stated in paragraphs CA-3.7.9 to CA-3.7.11.
- CA-3.7.9 Mudarabah exposures in the nature of specialized financing will be risk-weighted as per the supervisory slotting criteria as detailed in section CA-4.3.
- CA-3.7.10 Other Mudarabah exposures will be risk-weighted using the risk weights applicable to equities as explained in section CA-4.2.
- CA-3.7.11 If the bank demonstrates that a Mudarabah exposure meets the definition of trading book given in chapter CA-5, capital charge will be calculated as per market risk rules detailed in chapter CA-5.



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### CA-3.7 Mudarabah (continued)

#### *Summary of capital requirements for Mudarabah categories*

CA-3.7.12 The following tables set out the Mudarabah categories that attract capital charges:

Mudarabah Category	Credit RW	Market Risk Capital Charge
Specialized financing	<u>Supervisory slotting method will be applied.</u>  Between 90-270% RW of the contributed amount* to the business venture based on the four categories.	NA
Other	150% RW* of the contributed amount to the business venture less any specific provisions (if there is a third party guarantee, the RW of the guarantor shall be substituted for that of the assets for the amount of any such guarantee).	NA
Mudarabah meeting the definition of trading book		As set out in the applicable market risk section (See chapter CA-5).

\* 100% RW may be applied if the funds can be withdrawn by the bank at short notice of 5 working days.



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## **CA-3.8 Sukuk**

### ***Introduction***

- CA-3.8.1 This section sets out the minimum capital adequacy requirement to cover the credit risk and market risk arising from the holding of Sukuk.
- CA-3.8.2 This section is applicable only to Sukuk or certificates that represent the holder's proportionate ownership in an undivided part of an underlying asset where the holder assumes all rights and obligations to such asset. This section does not cover certificates that give the holders the entitlement to receive returns on an asset of which the ownership is not transferred to the Sukuk holders.
- CA-3.8.3 Sukuk can be broadly categorised into:
- (a) asset-based Sukuk, where the underlying assets offer fairly predictable returns to the Sukuk holders, such as in the case of Salam, Istisna'a and Ijarah (Note: the assets in question may be held by a Musharakah or Mudarabah which is securitised. This is not the same as the Musharakah or Mudarabah Sukuk mentioned below).
  - (b) equity-based Sukuk, where the returns are determined on a profit and loss sharing in the underlying investment which does not offer fairly predictable returns (e.g. Musharakah or Mudarabah for trading purposes).
- CA-3.8.4 CBB has the discretion to specify measurement approaches as it thinks appropriate for other types of Sukuk which are not listed in this section, provided they are approved by a Sharia board.

### **Salam Sukuk**

- CA-3.8.5 A Salam Sukuk represents fractional ownership of the capital of a Salam transaction, where the Salam capital is constituted by an advance payment to a counterparty as supplier of a commodity (the subject-matter) to be delivered at a future date. This type of Sukuk is non-tradable, since the subject-matter is considered to be a financial asset (a receivable). The gross return to the Sukuk holders consists of the margin or spread between the purchase price of the subject-matter and its selling price following delivery. In certain Sukuk issues, a third party gives an undertaking that the subject-matter will be sold at a price exceeding the purchase price by a specified margin. This may be achieved by means of a parallel Salam transaction in which a third party purchases the subject-matter for delivery on the same delivery date as in the original Salam contract.



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<b>CHAPTER</b>	<b>CA-3: The Banking Book - Minimum Capital Requirements for Islamic Financing Assets</b>

## **CA-3.8 Sukuk (continued)**

### **Istisna'a Sukuk**

- CA-3.8.6 An Istisna'a Sukuk represents a fractional share in the project financing of an undertaking to manufacture or construct an asset for a customer at a price to be paid in future instalments, the total of which equals the total face value of the Sukuk, in addition to mark-up. The Sukuk can be in the form of serial notes or certificates with different maturity dates that match the progress schedule of instalments as agreed between the buyer/customer of the asset and the manufacturer/bank. Istisna'a Sukuk are tradable as the subject-matter is considered to be a non-financial asset (work-in-process inventory).

### **Ijarah Sukuk**

- CA-3.8.7 An Ijarah Sukuk represents the holder's proportionate ownership in a leased asset where the Sukuk holders will collectively assume the rights and obligations of the lessor. The Sukuk holder will enjoy a share of the lease rental in proportionate to the ownership share in the leased asset. An Ijarah Sukuk is tradable from the issuance date as the subject-matter is a non-financial asset owned by the Sukuk holders. As a part-owner, the Ijarah Sukuk holder assumes a proportionate share of any loss if the leased asset is destroyed or of the cost of meeting the obligation to provide an alternative asset, failing which, the lessee can terminate the lease without paying future rentals.

### **Musharakah Sukuk**

- CA-3.8.8 A Musharakah Sukuk represents the direct pro-rata ownership of the holder in the assets of a private commercial enterprise or project where the subscription money is normally employed in purchasing non-liquid assets or such as real estate or moveable assets. A Musharakah Sukuk is a profit and loss sharing instrument where the exposure is of the nature of an equity position in the banking book, except in the case of investments (normally short-term) in assets for trading purposes. A Musharakah certificate can be tradable provided that non-cash and receivable assets are not less than 30% of market capitalisation.

### **Mudarabah (Muqaradah) Sukuk**

- CA-3.8.9 Sukuk holders subscribe to the certificates issued by a Mudarib and share the profit and bear any losses arising from the Mudarabah operations. The returns to the holders are dependent on the revenue generated by the underlying investment. The rule regarding tradability of the certificates is the same as for Musharakah certificates.



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### **CA-3.8 Sukuk (continued)**

#### *Calculation of capital charge*

- CA-3.8.10** If the Sukuk has the characteristics of a claim (or debt) then the Sukuk should be risk weighted using its issue specific rating according to the nature of the issuer (i.e. sovereign, bank or corporate etc). If the Sukuk is unrated and has the characteristics of a claim or debt, the risk weight applicable will be based on the risk weight applicable to the issuer.
- CA-3.8.11** If the Sukuk is equity in nature, such investment should be treated as an equity investment and risk weighted accordingly (i.e. 100 % for listed and 150 % for others).
- CA-3.8.12** The bank can apply to CBB for using look-through approach for such investment if it can demonstrate that look-through approach is more appropriate to the circumstances of the bank.
- CA-3.8.13** If there are no voting rights attached to investment in Sukuk, the investment will not be subjected to consolidation and deduction requirements (except large exposure limit).
- CA-3.8.14** For the purpose of determining “large exposure limit” for investment in Sukuk, look-through approach should be used (despite the fact that look-through approach is not used to risk weight the investment)
- CA-3.8.15** If the bank demonstrates that a Sukuk exposure meets the definition of trading book given in chapter CA-5, capital charge will be calculated as per market risk rules detailed in chapter CA-5.





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<b>CHAPTER</b>	<b>CA-3: The Banking Book - Minimum Capital Requirements for Islamic Financing Assets</b>

### CA-3.8 Sukuk (continued)

#### *Summary of capital requirements for Sukuk exposures*

CA-3.8.16 The following tables summarises the capital requirements for Sukuk exposures:

<b>Sukuk Category</b>	<b>Credit RW</b>	<b>Market Risk Capital Charge</b>
In nature of claim or debt	Risk-weighted according to the external rating of the Sukuk (where rated) or according to the risk weight applicable to the issuer (where unrated)	
In nature of equity - Listed	<u>100% RW</u>	NA
In nature of equity– Not listed	<u>150% RW</u>	NA
If the bank gets approval to apply “look-through approach”	<u>RWs applicable to the underlying assets</u>	NA
Sukuk meeting the definition of trading book	<u>NA</u>	As set out in the applicable market risk section (See chapter CA-5).

\* 100% RW may also be applied if the funds can be withdrawn by the bank at short notice of 5 working days.



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<b>CHAPTER</b>	<b>CA-4: Credit Risk – The Standardized Approach</b>

## **CA-4.1 Introduction**

CA-4.1.1 Credit risk exposures in Islamic financing arise in connection with accounts receivable in Murabaha contracts, counterparty risk in Salam contracts, accounts receivable and counterparty risk in Istisna'a contracts and lease payments receivable in Ijarah contracts, and Sukuk held to maturity in the banking book. Credit risk is measured according to the Standardised Approach as outlined in the Basel II guidelines, except for certain exposures arising from investments by means of Musharaka or Mudaraba contracts in assets in the banking book. The latter are to be treated as giving rise to credit risk (in the form of capital impairment risk), and are to be risk-weighted applying the supervisory slotting criteria for exposures in the nature of specialised financing and the risk weights applicable to equities for other equity exposures as detailed in the Musharaka and Mudaraba sections of this Rulebook.

CA-4.1.2 Broadly, the assignment of Risk Weights (RW) under the standardised approach takes into consideration the following:

- the credit risk rating of an obligor or other counterparty, or a security, based on external credit assessment institutions (ECAI) ratings<sup>7</sup>. In determining the risk weights in the standardised approach, Islamic banks must use assessments by only those external credit assessment institutions which are recognised as eligible for capital purposes by CBB in accordance with the criteria defined in section CA-4.6.
- credit risk mitigation techniques adopted by the banks;
- types of the underlying assets that are sold and collateralised or leased by the banks; and
- the amount of specific provisions made for the overdue portion of accounts receivable or lease payments receivable.

CA-4.1.3 Where a discount is applied on fair value of an asset (as explained in **CA-2.1.4**), the value of the asset will be adjusted to exclude that discount part. Refer to appendix CA-7.

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<sup>7</sup> The notations follow the methodology used by one institution, Standard & Poor's. The use of Standard & Poor's credit ratings is an example only; those of some other external credit assessment institutions could equally well be used. The ratings used throughout this document, therefore, do not express any preferences or determinations on external assessment institutions by CBB.



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<b>CHAPTER</b>	<b>CA-4: Credit Risk – The Standardized Approach</b>

## **CA-4.2 Segregation of claims**

### *Claims on sovereigns*

CA-4.2.1 Claims on governments of GCC member states (hereinafter referred to as GCC) and their central banks can be risk weighted at 0%. Claims on other sovereigns and their central banks are given a preferential risk weighting of 0% where such claims are denominated and funded in the relevant domestic currency of that sovereign/central bank (e.g. if a Bahraini bank has a claim on government of Australia and the loan is denominated and funded in Australian dollar, it will be risk weighted at 0%). Such preferential risk weight for claims on GCC/other sovereigns and their central banks will be allowed only if the relevant supervisor also allows 0% risk weighting to claims on its sovereign and central bank.

CA-4.2.2 **Claims on sovereigns other than those referred to in the previous paragraph must be assigned risk weights as follows:**

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

### *Claims on international organizations*

CA-4.2.3. **Claims on the Bank for International Settlements, the International Monetary Fund and the European Central Bank must receive a 0% risk weight.**

### *Claims on non-central government public sectors entities (PSEs)*

CA-4.2.4 **Claims on the Bahraini PSEs listed in Appendix CA-8 will be treated as claims on the government of Bahrain.**

CA-4.2.5 **Where other supervisors also treat claims on named PSEs as claims on their sovereigns, claims to those PSEs are treated as claims on the respective sovereigns as outlined in paragraphs CA-4.2.1 and CA-4.2.2 above. These PSE's must be shown on a list maintained by the concerned central bank or financial regulator. Where PSE's are not on such a list, they must be subject to the treatment outlined in paragraph CA-4.2.6 below.**



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## **CA-4.2 Segregation of claims (continued)**

**CA-4.2.6** Claims on all other (foreign) PSEs (i.e. not having sovereign treatment) denominated and funded in the home currency of the sovereign must be risk weighted as allowed by their home country supervisors, provided the sovereign carries rating **BBB-** or above. Claims on PSEs with no explicit home country weighting or to PSEs in countries of **BB+** sovereign rating and below are subject to ECAI ratings as per the following table:

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

**CA-4.2.7** Claims on commercial companies owned by governments must be risk weighted as normal commercial entities unless they are covered by a government guarantee that satisfies the conditions in **CA-4.7** below in which case they may take the risk weight of the concerned government.

### ***Claims on multilateral development banks (MDB's)***

**CA-4.2.8** MDB's currently eligible for a 0% risk weight are: the World Bank Group comprised of the International Bank for Reconstruction and Development (IBRD) and the International Finance Corporation (IFC), the Asian Development Bank (ADB), the African Development Bank (AfDB), the European Bank for Reconstruction and Development (EBRD), the Inter-American Development Bank (IADB), the European Investment Bank (EIB), the European Investment Fund (EIF), the Nordic Investment Bank (NIB), the Caribbean Development Bank (CDB), the Islamic Development Bank (IDB), Arab Monetary Fund (AMF), the Council of Europe Development Bank (CEDB), the Arab Bank for Economic Development in Africa (ABEDA), Council of European Resettlement Fund (CERF) and the Kuwait Fund for Arab Economic Development (KFAED).

**CA-4.2.9** The claims on MDB's, which do not qualify for the 0% risk weighting, should be assigned risk weights as follows:

Banks Credit Quality Grades	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Un-rated
Risk weights	20%	50%	50%	100%	150%	50%



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## **CA-4.2 Segregation of claims (continued)**

### *Claims on Islamic banks and conventional banks*

**CA-4.2.10** Claims on banks must be risk weighted as given in the following table. No claim on an unrated bank may receive a risk weight lower than that applied to claims on its sovereign of incorporation.

Banks Credit Quality Grades	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Un-rated
Standard risk weights	20%	50%	50%	100%	150%	50%
Preferential risk weight	20%	20%	20%	50%	150%	20%

**CA-4.2.11** Short-term claims on locally incorporated banks may be assigned a risk weighting of 20% where such claims on the banks are of an original maturity of 3 months or less denominated and funded in either “BD or US\$. A preferential risk weight that is one category more favourable than the standard risk weighting may be assigned to claims on foreign banks licensed in Bahrain of an original maturity of 3 months or less denominated and funded in the relevant domestic currency (other than claims on banks that are rated below B-). Such preferential risk weight for short-term claims on banks licensed in other jurisdictions will be allowed only if the relevant supervisor also allows this preferential risk weighting to short-term claims on its banks.

**CA-4.2.12** Claims with an (contractual) original maturity under 3 months that are expected to be rolled over (i.e. where the effective maturity is longer than 3 months) will not qualify for a preferential treatment for capital adequacy purposes.

### *Claims on investment firms*

**CA-4.2.13** Claims on category one and category two investment firms which are subject to direct supervisory and regulatory provisions from the CBB may be treated as claims on banks for risk weighting purposes but without the use of preferential risk weight for short-term claims. Claims on category three investment firms must be treated as claims on corporates for risk weighting purposes. Claims on investment firms in other jurisdictions will be treated as claims on corporates for risk weighting purposes. However, if the bank can demonstrate that the concerned investment firm is subject to a Basel II equivalent capital adequacy regime and is treated as a bank for risk weighting purposes by its home regulator, then claims on such investment firms may be treated as claims on banks.

### *Claims on corporates, including insurance companies*

**CA-4.2.14** Risk weighting for corporates including insurance companies is as follows:



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## **CA-4.2 Segregation of claims (continued)**

Credit assessment	AAA to AA-	A+ to A-	BBB+ to BB-	Below BB-	Unrated
Risk weight	20%	50%	100%	150%	100%

CA-4.2.15 Risk weighting for unrated (corporate) claims will be reviewed and where appropriate, may be increased by the CBB. Credit facilities to small/medium enterprises may be placed in the regulatory retail portfolio in limited cases below.

### *Claims included in the regulatory retail portfolios*

CA-4.2.16 No claim on any unrated corporate, where said corporate originates from a foreign jurisdiction, may be given a risk weight lower than that assigned to a corporate within its own jurisdiction, and in no case will it be below 100%.

CA-4.2.17 Retail claims that are included in the regulatory retail portfolio must be risk weighted at 75%, except as provided in CA-4.2.21 for the past due receivables.

CA-4.2.18 To be included in the regulatory retail portfolio, claims must meet the following criteria:

- (a) **Orientation** — the exposure is to an individual person or persons or to a small business. A small business is a Bahrain-based business with annual turnover below BD 2mn.
- (b) **Product** — The exposure takes the form of any of the following: revolving credits and lines of credit (including credit cards and running finance), personal term finance and leases (e.g. instalment finance, auto finance and leases, student and educational finance, personal finance) and small business facilities and commitments. Islamic products which involve securities (such as Musharakah, Mudarabah, Sukuks and equities), whether listed or not, are specifically excluded from this category. Mortgage finance will be excluded if they qualify for treatment as claims secured by residential property (see below). Finance for purchase of shares are also excluded from the regulatory retail portfolios.
- (c) **Granularity** — The regulatory retail portfolio is sufficiently diversified to a degree that it reduces the risks in the portfolio, warranting a 75% risk weight. No aggregate exposure to one counterpart<sup>8</sup> can exceed 0.2% of the overall regulatory retail portfolio.

<sup>8</sup> Aggregated exposure means gross amount (i.e. not taking any credit risk mitigation into account) of all forms of debt exposures (e.g. finances or commitments) that individually satisfy the three other criteria. In addition, “to one counterpart” means one or several entities that may be considered as a single beneficiary (e.g. in the case of a small business that is affiliated to another small business, the limit would apply to the bank’s aggregated exposure on both businesses).



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## **CA-4.2 Segregation of claims (continued)**

- (d) The maximum aggregated retail exposure to one counterpart must not exceed an absolute limit of BD 250,000.

### *Claims secured by residential property*

- CA-4.2.19** Lending fully secured by first mortgages on residential property that is or will be occupied by the borrower, or that is leased, must carry a risk weighting of 75%. However, if the bank can justify foreclosure or repossession for a claim, a 35% risk weight will be allowed. To get this lower risk weight the bank must obtain a satisfactory legal opinion that foreclosure or repossession is possible without any impediment.

### *Claims secured by commercial real estate*

- CA-4.2.20** Claims secured by mortgages on commercial real estate are subject to a minimum of 100% risk weight. If the borrower is rated below BB-, the risk-weight corresponding to the rating must be applied.

### *Past due receivables*

- CA-4.2.21** In the event that accounts receivable or lease payments receivable become past due, the exposure shall be risk-weighted in accordance with the following table. The exposures should be risk weighted net of specific provisions (see CA-4.3.5 for exposures risk-weighted under Supervisory Slotting Criteria).

Type	RW	% of Specific Provisions for Past Due Receivables
Unsecured exposure (other than a qualifying residential mortgage loan) that is past due more than 90 days, net of specific provisions	150%	Less than 20% of the outstanding receivables.
	100%	At least 20% of the outstanding receivables.
Exposure secured by RRE	100%	For receivables that are past due for more than 90 days, net of specific provisions.

- CA-4.2.22** For the purposes of defining the secured portion of a past due loan, eligible collateral and guarantees will be the same as for credit risk mitigation purposes.

- CA-4.2.23** Past due retail loans are to be excluded from the overall regulatory retail portfolio when assessing the granularity criterion, for risk-weighting purposes.





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## CA-4.2 Segregation of claims (continued)

### *Investments in equities and funds*

CA-4.2.24 Investments in listed equities must be risk weighted at 100% while equities other than listed must be risk weighted at 150%. For risk-weighting of Sukuk, refer to Section CA-3.8.

CA-4.2.25 Investments in funds (e.g. mutual funds, Collective Investment Undertakings etc.) must be risk weighted as follows:

- If the instrument (e.g. units) is rated, it should be risk-weighted according to its external rating (for risk-weighting, it must be treated as a “claim on corporate”);
- If not rated, such investment should be treated as an equity investment and risk weighted accordingly (i.e. 100% for listed and 150% for others);
- The bank can apply to CBB for using the look-through approach for such investments if it can demonstrate that the look-through approach is more appropriate to the circumstances of the bank;
- If there are no voting rights attached to investment in funds, the investment will not be subjected to consolidation and deduction requirements (except large exposure limits);
- For the purpose of determining “large exposure limit” for investment in funds, the look-through approach should be used (even if the look-through approach is not used to risk weight the investment).

CA-4.2.26 CBB may enforce a bank to adopt the ‘Simple Risk Weight Method’ for equities (Section CA-4.4) if the CBB considers that bank’s equity portfolio is significant.

### *Holdings of Real Estate*

CA-4.2.27 All holdings of real estate by banks (i.e. owned directly or by way of investments in Real Estate Companies, subsidiaries or associate companies or other arrangements such as trusts, funds or REITs) must be risk-weighted at 200%. Premises occupied by the bank may be weighted at 100%. Investments in Real Estate Companies will be subject to the materiality thresholds for commercial companies described in Module PCD and therefore any holdings which amount to 15% or more of regulatory capital will be subject to deduction. The holdings below the 15% threshold will be weighted at 200%.





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## CA-4.2 Segregation of claims (continued)

### *Other assets*

CA-4.2.28 Gold bullion held in own vaults or on an allocated basis to the extent backed by bullion liabilities may be treated as cash and therefore risk-weighted at 0%. In addition, cash items in the process of collection must be risk-weighted at 20%. The standard risk weight for all other assets will be 100%. Investments in regulatory capital instruments issued by banks or investment firms must be risk weighted at a minimum of 100%, unless they are deducted from the capital base according to the Prudential Consolidation and Deduction Requirements Module.

### *Underwriting of non-trading book items*

CA-4.2.29 Where a bank has acquired assets on its balance sheet in the banking book which it is intending to place with third parties under a formal arrangement and is underwriting the placement, the following risk weightings apply during the underwriting period (which may not last for more than 90 days). Once the underwriting period has expired, the usual risk weights should apply.

1. For holdings of private equity, a risk weighting of 100% will apply instead of the usual 150% (see CA-4.2.24).
2. For holdings of Real Estate, a risk weight of 100% will apply instead of the usual 200% risk weight (see CA-4.2.27).



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### **CA-4.3 Supervisory slotting criteria**

**CA-4.3.1** Equity exposures in the nature of specialized financing will be risk-weighted as per the supervisory slotting criteria as detailed below. Specialized lending is basically a typical kind of exposure in which some special underlying assets are both the source of repayment and security. This may include financing extended to:

- power plants, chemical processing plants, mines, transportation infrastructure, environment, telecommunications infrastructure, ships, aircraft, satellites, railcars, fleets, crude oil, metals, crops, office buildings to let, retail space, multifamily residential buildings, industrial or warehouse space, hotels, High volatility real estate etc.
- retail space;
- multifamily residential buildings;
- industrial or warehouse space;
- hotels.

**CA-4.3.2** A bank is required to map its RW into four supervisory categories as set out in the Appendix CA-1 (specialised financing) for Limited and Non-Recourse Istisna'a exposures, Mudarabah exposures, Sukuk exposures and Musharakah in a business venture exposures, where the RW for each category is as follows:

Supervisory Categories	Strong	Good	Satisfactory	Weak
External Credit Assessments	BBB- or better	BB+ or BB	BB- to B+	B to C-
Risk Weights	70%	90%	115%	250%

**CA-4.3.3** A bank with Diminishing Musharaka exposures in real estate are required to map its RW into the four supervisory categories as set out in Appendix CA-2 (Diminishing Musharaka in real estate) where the RW of each category is as follows:

Supervisory Categories	Strong	Good	Satisfactory	Weak
Risk Weights	90%	110%	135%	270%

**CA-4.3.4** The above RW under the slotting criteria for specialised financing include an additional fixed factor, equal to a 20% RW, to cater for the potential decline in the Musharakah's net asset value.



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### **CA-4.3 Supervisory slotting criteria (continued)**

- CA-4.3.5 If any exposure which is to be risk-weighted under this sub-section becomes past due, it will be risk-weighted at the higher of risk-weight applicable under CA-4.2.21 or the risk-weight applicable under this sub-section e.g. if an exposure getting 90% risk-weight under CA-4.3.2 above becomes past due, it will be risk-weighted under CA-4.2.21 (at 100% or 150% whichever is applicable). However if an exposure getting 250% risk-weight under CA-4.3.2 above becomes past due, it will continue to be risk-weighted at 250%.



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#### **CA-4.4 Simple risk-weight method**

**CA-4.4.1** As stated in CA-4.2.26, CBB may enforce a bank to adopt this treatment for equities if the CBB considers that bank's equity portfolio is significant.

**CA-4.4.2** The RW under simple risk weight method for equity position risk in respect of an equity exposure shall be 300% for listed and 400% for others less any specific provisions for impairment. If there is a third party guarantee to make good impairment losses, the RW of the guarantor shall be substituted for that of the assets for the amount of any such guarantee.



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**CA-4.5 Risk weighting – Off-balance-sheet items**

**CA-4.5.1** Off-balance-sheet items must be converted into credit exposure equivalents using credit conversion factors (CCFs).

**CA-4.5.2** Commitments with an original maturity of up to one year and commitments with an original maturity of over one year will receive a CCF of 20% and 50%, respectively.

**CA-4.5.3** Any commitments that are unconditionally cancellable at any time by the bank without prior notice, or that are subject to automatic cancellation due to deterioration in a borrowers' creditworthiness, will receive a 0% CCF.

**CA-4.5.4** A CCF of 100% must be applied to the lending of banks' securities or the posting of securities as collateral by banks.

**CA-4.5.5** For short-term self-liquidating trade letters of credit arising from the movement of goods a 20% CCF must be applied to both issuing and confirming banks.

**CA-4.5.6** Where there is an undertaking to provide a commitment on an off-balance sheet item, banks are to apply the lower of the two applicable CCF's.

**CA-4.5.7** Direct credit substitutes, e.g. general guarantees of indebtedness (including standby letters of credit serving as financial guarantees for finance and securities) and acceptances (including endorsements with the character of acceptances) must be applied a CCF of 100%.

**CA-4.5.8** Sale and repurchase agreements and asset sales with recourse, where the credit risk remains with the bank, must be applied a CCF of 100%.

**CA-4.5.9** Forward asset purchases, forward deposits and partly-paid shares and securities, which represent commitments with certain drawdown must be applied a CCF of 100%.

**CA-4.5.10** Certain transaction-related contingent items (e.g. performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions) must be applied a CCF of 50%.

**CA-4.5.11** Note issuance facilities and revolving underwriting facilities must be applied a CCF of 50%.



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#### CA-4.5 Risk weighting – Off-balance-sheet items (continued)

CA-4.5.12 Banks must closely monitor securities, commodities, and foreign exchange transactions that have failed, starting the first day they fail. A capital charge to failed transactions must be calculated in accordance with CBB guidelines set forth in Appendix CA-5 – ‘Capital treatment for failed trades and non DvP transactions’.

CA-4.5.13 With regard to unsettled securities, commodities, and foreign exchange transactions, banks are encouraged to develop, implement and improve systems for tracking and monitoring the credit risk exposure arising from unsettled transactions as appropriate for producing management information that facilitates action on a timely basis.

CA-4.5.14 Furthermore, when such transactions are not processed through a delivery-versus-payment (DvP) or payment-versus-payment (PvP) mechanism, banks must calculate a capital charge as set forth in **Appendix CA-5**.

**Please Note:** An import or export financing, which is based on Murabahah where the underlying goods/shipment are collateralised and insured, shall attract a 20% credit conversion factor to the banks that issues or confirms the letter of credit. This treatment of collateral assumes there are no obstacles to the exercise of rights over it by the issuer or confirmer (see “Pledge of assets as collateral as detailed below under Credit Risk Mitigation).



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## **CA-4.6 External credit assessments**

### *The recognition process and eligibility criteria*

#### **CA-4.6.1**

CBB will assess all External Credit Assessment Institutions (ECAI) according to the six criteria below. Any failings, in whole or in part, to satisfy these to the fullest extent will result in the respective ECAI's methodology and associated resultant rating not being accepted by the CBB.

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

#### **CA-4.6.2**

The CBB recognizes Standard and Poor's, Moody's, Fitch IBCA, Capital Intelligence and the Islamic International Rating Agency as eligible ECAIs. With respect to the possible recognition of other rating agencies as eligible ECAIs, CBB will update this paragraph subject to the rating agencies satisfying the eligibility requirements. (See Appendix CA-6 for mapping of eligible ECAIs).



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#### CA-4.6 External credit assessments (continued)

**CA-4.6.3 Banks must use the chosen ECAIs 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 eligible ECAIs.**

CA-4.6.4 Banks must disclose ECAIs that they use for the risk weighting of their assets by type of claims, the risk weights associated with the particular rating grades as determined by CBB through the mapping process as well as the aggregated risk-weighted assets for each risk weight based on the assessments of each eligible ECAI.

##### *Multiple assessments*

**CA-4.6.5 If there are two assessments by eligible ECAIs chosen by a bank which map into different risk weights, the higher risk weight must be applied.**

**CA-4.6.6 If there are three or more assessments by eligible ECAIs chosen by a bank which map into different risk weights, the assessments corresponding to the two lowest risk weights should be referred to and the higher of those two risk weights must be applied.**

##### *Issuer versus issues assessment*

CA-4.6.7 Where a bank invests in a particular issue that has an issue-specific assessment, the risk weight of the claim will be based on this assessment. Where the bank's claim is not an investment in a specific assessed issue, the following general principles apply.

- (a) In circumstances where the borrower has a specific assessment for an issued debt — but the bank's claim is not an investment in this particular debt — a high quality credit assessment (one which maps into a risk weight lower than that which applies to an unrated claim) on that specific debt may only be applied to the bank's un-assessed claim if this claim ranks *pari passu* or senior to the claim with an assessment in all respects. If not, the credit assessment cannot be used and the un-assessed claim will receive the risk weight for unrated claims.
- (b) In circumstances where the borrower has an issuer assessment, this assessment typically applies to senior unsecured claims on that issuer. Consequently, only senior claims on that issuer will benefit from a high quality issuer assessment. Other un-assessed claims of a highly assessed issuer will be treated as unrated. If either the issuer or a single issue has a low quality assessment (mapping into a risk weight equal to or higher than that which applies to unrated claims), an un-assessed claim on the same counterparty will be assigned the same risk weight as is applicable to the low quality assessment.





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## **CA-4.6 External credit assessments (continued)**

CA-4.6.8 Whether the bank intends to rely on an issuer- or an issue-specific assessment, the assessment must take into account and reflect the entire amount of credit risk exposure the bank has with regard to all payments owed to it.<sup>9</sup>

CA-4.6.9 In order to avoid any double counting of credit enhancement factors, no recognition of credit risk mitigation techniques will be taken into account if the credit enhancement is already reflected in the issue specific rating (see paragraph CA-4.7.3).

### ***Domestic currency and foreign currency assessments***

CA-4.6.10 Where unrated exposures are risk weighted based on the rating of an equivalent exposure to that borrower, the general rule is that foreign currency ratings would be used for exposures in foreign currency. Domestic currency ratings, if separate, would only be used to risk weight claims denominated in the domestic currency.

CA-4.6.11 However, when an exposure arises through a bank's participation in a loan that has been extended, or has been guaranteed against convertibility and transfer risk, by certain MDBs, its convertibility and transfer risk can be considered by CBB, on a case by case basis, to be effectively mitigated. To qualify, MDBs must have preferred creditor status recognised in the market and be included in MDB's qualifying for 0% risk rate under CA-4.2.8. In such cases, for risk weighting purposes, the borrower's domestic currency rating may be used instead of its foreign currency rating. In the case of a guarantee against convertibility and transfer risk, the local currency rating can be used only for the portion that has been guaranteed. The portion of the loan not benefiting from such a guarantee will be risk-weighted based on the foreign currency rating.

### ***Short-term/long-term assessments***

CA-4.6.12 For risk-weighting purposes, short-term assessments are deemed to be issue-specific. They can only be used to derive risk weights for claims arising from the rated facility. They cannot be generalised to other short-term claims, except under the conditions of paragraph CA-4.6.14. In no event can a short-term rating be used to support a risk weight for an unrated long-term claim. Short-term assessments may only be used for short-term claims against banks and corporates. The table below provides a framework for banks' exposures to specific short-term facilities, such as a particular issuance of commercial paper: For any Sharia contract with an original maturity of up to three months that is not rolled over, the short-term RW as set out in the following table shall be applied.

<sup>9</sup> For example, if a bank is owed both principal and interest, the assessment must fully take into account and reflect the credit risk associated with repayment of both principal and interest.



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#### **CA-4.6 External credit assessments (continued)**

<b>Credit assessment</b>	<b>A-1/P-1<sup>10</sup></b>	<b>A-2/P-2</b>	<b>A-3/P-3</b>	<b>Others<sup>11</sup></b>
<b>Risk weight</b>	20%	50%	100%	150%

CA-4.6.13 If a short-term rated facility attracts a 50% risk-weight, unrated short-term claims cannot attract a risk weight lower than 100%. If an issuer has a short-term facility with an assessment that warrants a risk weight of 150%, all unrated claims, whether long-term or short-term, should also receive a 150% risk weight, unless the bank uses recognised credit risk mitigation techniques for such claims.

CA-4.6.14 For short-term claims on banks, the interaction with specific short-term assessments is expected to be the following:

- (a) The general preferential treatment for short-term claims, as defined under paragraphs CA-4.2.11 and CA-4.2.12, applies to all claims on banks of up to three months original maturity when there is no specific short-term claim assessment.
- (b) When there is a short-term assessment and such an assessment maps into a risk weight that is more favourable (i.e. lower) or identical to that derived from the general preferential treatment, the short-term assessment should be used for the specific claim only. Other short-term claims would benefit from the general preferential treatment.
- (c) When a specific short-term assessment for a short term claim on a bank maps into a less favourable (higher) risk weight, the general short-term preferential treatment for inter-bank claims cannot be used. All unrated short-term claims should receive the same risk weighting as that implied by the specific short-term assessment.

CA-4.6.15 When a short-term assessment is to be used, the institution making the assessment needs to meet all of the eligibility criteria for recognising ECAs as presented in paragraph CA-4.6.1 in terms of its short-term assessment.

##### ***Level of application of the assessment***

**CA-4.6.16 External assessments for one entity within a corporate group must not be used to risk weight other entities within the same group.**

<sup>10</sup> The notations follow the methodology used by Standard & Poor's and by Moody's Investors Service. The A-1 rating of Standard & Poor's includes both A-1+ and A-1-.

<sup>11</sup> This category includes all non-prime and B or C ratings.



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## **CA-4.6 External credit assessments (continued)**

### ***Unsolicited ratings***

- CA-4.6.17 As a general rule, banks should use solicited ratings from eligible ECAs but they are also allowed to use unsolicited ratings in the same way as solicited ratings. However, there may be the potential for ECAs to use unsolicited ratings to put pressure on entities to obtain solicited ratings. If such behaviour is identified, CBB may disallow the use of unsolicited ratings.



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### C.A-4.7 Credit Risk Mitigation

CA-4.7.1 The exposure in respect of an obligor or other, counterparty can be further adjusted or reduced by taking into account the credit risk mitigation (CRM) techniques employed by Islamic banks (off-balance sheet items will first be converted into on-balance sheet equivalents prior to the CRM being applied). Banks use a number of techniques to mitigate the credit risks to which they are exposed. For example, exposures may be collateralised by first priority claims, in whole or in part with cash or securities or an exposure may be guaranteed by a third party. Additionally banks may agree to net exposure amounts owed to them against deposits from the same counterparty.

#### *General remarks*

CA-4.7.2 No transaction in which CRM techniques are used should receive a higher capital requirement than an otherwise identical transaction where such techniques are not used.

**CA-4.7.3 The effects of CRM will not be double counted. Therefore, no additional recognition of CRM for regulatory capital purposes will be applicable on claims for which an issue-specific rating is used that already reflects that CRM. As stated in paragraph CA-4.6.8 of the section on the standardised approach, principal-only ratings will also not be allowed within the framework of CRM.**

CA-4.7.4 While the use of CRM techniques reduces or transfers credit risk, it simultaneously may increase other risks (residual risks). Residual risks include legal, operational, liquidity and market risks. Therefore, it is imperative that banks employ robust procedures and processes to control these risks, including strategy; consideration of the underlying credit; valuation; policies and procedures; systems; control of roll-off risks; and management of concentration risk arising from the bank's use of CRM techniques and its interaction with the bank's overall credit risk profile. Where these risks are not adequately controlled, the CBB may impose additional capital charges or take supervisory actions.

CA-4.7.5 Market Discipline requirements must also be observed for banks to obtain capital relief in respect of any CRM techniques.

#### *Legal certainty*

**CA-4.7.6 In order for banks to obtain capital relief for any use of CRM techniques, the following minimum standards for legal documentation must be met.**

**CA-4.7.7 All documentation used in collateralised transactions and for documenting on- balance sheet netting and guarantees must be binding on all parties and legally enforceable in all relevant jurisdictions. Banks must have conducted sufficient legal review to verify this and have a well founded legal basis to reach this conclusion, and undertake such further review as necessary to ensure continuing enforceability.**



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## **CA-4.7 Credit Risk Mitigation (continued)**

### ***CRM techniques***

The CRM techniques that are commonly employed by the bank are as follows:

#### ***Hamish Jiddiyyah (security deposit held as collateral)***

CA-4.7.8 Hamish Jiddiyyah (HJ), a refundable security deposit taken by the bank prior to establishing a contract, carries a limited recourse to the extent of damages incurred by the bank when the purchase orderer fails to honour a binding promise to purchase (PP) or promise to lease (PL). The bank has recourse to the clients in the PP/PL if the HJ is insufficient to cover for the damages.

CA-4.7.9 In the case of a non-binding PP/PL, the HJ shall be refunded in full to the clients, and hence is not considered as an eligible CRM.

#### ***Urbun (earnest money held after a contract is established as collateral to guarantee contract performance)***

CA-4.7.10 The urbun taken from a purchaser or lessee when a contract is established accrues to the benefit of the bank if the purchaser or lessee breaches the contract within the agreed upon term.

#### ***Guarantee from a Third Party (recourse or non-recourse guarantee)***

CA-4.7.11 The guarantor may or may not have recourse to the debtor (i.e. purchaser or lessee) and the guarantee can be for a fixed period and for a limited amount, without any consideration being received by the guarantor. However, a claim should first be made against the debtor, and then against the guarantor, unless an option is provided to make the claim against either the debtor or the guarantor.

CA-4.7.12 The guarantee can also be given in a ‘blanket’ form that covers an unknown amount or a future receivable. However, this type of guarantee (sometimes known as a “market/business guarantee” or “guarantee of contractual obligation”) is revocable at any time prior to the existence of the future receivables and does not qualify as an eligible CRM.

#### ***Leased assets used as collateral***

CA-4.7.13 Assets leased under Ijarah or IMB contracts fulfil a function similar to that of collateral, in that they may normally be repossessed by the lessor in the event of default by the lessee (see residential real estate CA-4.2.19 and below).



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## **CA-4.7 Credit Risk Mitigation (continued)**

- CA-4.7.14 The value of such assets may be offset against the exposure amount to the customer, subject to the regulatory haircuts under the Standard Supervisory Haircut <sup>12</sup> Approach (CA-4.7.32 onwards) for leased assets mentioned in the paragraph CA-4.7.39. Ijarah receivables which comprise Residential Real Estate do not generally satisfy the conditions laid out in Paragraph CA-4.7.23 and therefore such receivables will be weighted at 75% and the collateral will not be recognised for risk mitigation purposes. If the bank can show legal evidence that it may exercise foreclosure, a risk weighting of 35% may be applied to the lease receivable in the case of residential property occupied by the customer. Commercial real estate may be used as collateral for Ijarah transactions as long as it satisfies the criteria of paragraph CA-4.7.23 (and the supervisory haircut is then applied).
- CA-4.7.15 The leased asset to be used as collateral must be a Sharia compliant tangible asset of monetary value that can be lawfully owned, and is saleable, specifiable, deliverable and free of encumbrance.
- CA-4.7.16 The collateralisation under the concept of “rahn” or “kafālah” shall be properly documented in a security agreement or, in the body of a contract to the extent permissible by Sharia, and must be binding on all parties and legally enforceable in the relevant jurisdictions.
- CA-4.7.17 The banks must additionally document its procedures for the valuation of leased assets to be used as collateral as described above. This valuation would normally be the depreciated value of the asset as reported in the financial statement.

### ***Guarantees***

- CA-4.7.18 Capital relief for the use of a guarantee shall be given when the following conditions are satisfied:
- a. the guarantee represents the bank’s direct claim on the guarantor;
  - b. the guarantee is irrevocable and does not allow the guarantor to unilaterally cancel the guarantee after creation of the receivables;
  - c. the guarantee is unconditional and provides no protection clause that prevents the guarantor from being obliged to pay out in a timely manner in the event that the original counterparty fails to make payments due;

<sup>12</sup> The term ‘haircut’ in this context refers to a discount on the depreciated value of an asset as collateral after taking into consideration some inherent risks that affect the volatility of the market price or value of the asset. It is commonly expressed in terms of a percentage by which an asset’s value as collateral is reduced.



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## **CA-4.7 Credit Risk Mitigation (continued)**

d. the bank has the right to pursue, in a timely manner, the guarantor for monies outstanding, rather than having to pursue the original counterparty to recover its exposure

e. the guarantee shall be an explicitly documented obligation assumed by the guarantor; and

f. the guarantee shall cover all types of expected payments made under the contract in the event that the original counterparty defaults.

g. Portions of claims guaranteed by the entities detailed in paragraph CA-4.2.1 above, where the guarantee is denominated in the domestic currency (and US\$ in case of a guarantee provided by the Government of Bahrain and CBB) may get a 0% risk-weighting. A claim may be covered by a guarantee that is indirectly counter-guaranteed by such entities. Such a claim may be treated as covered by a sovereign guarantee provided that:

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

**Please Note:** Though insurance is normally part and parcel of the project risk financing, it is not regarded by CBB as a credit risk mitigation technique.

### ***Collateralised transactions***

CA-4.7.19 Where banks take eligible financial collateral as defined in paragraph CA.4.7.28, they are allowed to reduce their credit exposure to a counterparty when calculating their capital requirements to take account of the risk mitigating effect of the collateral (except residential real estate – see CA-4.7.14).

### ***Overall framework and minimum conditions***

CA-4.7.20 Banks may opt for either the simple approach, which substitutes the risk weighting of the collateral for the risk weighting of the counterparty for the collateralised portion of the exposure (generally subject to a 20% floor), or for the standard supervisory haircuts approach which allows fuller offset of collateral against exposures, by effectively reducing the exposure amount by the value ascribed to the collateral.



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## **CA-4.7 Credit Risk Mitigation (continued)**

- CA-4.7.21 Banks may operate under either, but not both, approaches in the banking book, but only under the standard supervisory haircuts approach in the trading book. Partial collateralisation is recognised in both approaches. Mismatches in the maturity of the underlying exposure and the collateral will only be allowed under the standard supervisory haircuts approach.
- CA-4.7.22 However, before capital relief will be granted in respect of any form of collateral, the standards set out below in paragraphs CA-4.7.23 to CA-4.7.26 must be met under either approach.





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## **CA-4.7 Credit Risk Mitigation (continued)**

- CA-4.7.23** In addition to the general requirements for legal certainty set out in paragraphs CA-4.7.6 and CA-4.7.7, the legal mechanism by which collateral is pledged or transferred must ensure that the bank has the right to liquidate or take legal possession of it, in a timely manner, in the event of the default, insolvency or bankruptcy (or one or more otherwise-defined credit events set out in the transaction documentation) of the counterparty (and, where applicable, of the custodian holding the collateral). Furthermore banks must take all steps necessary to fulfil those requirements under the law applicable to the bank's interest in the collateral for obtaining and maintaining an enforceable security interest, e.g. by registering it with a registrar, or for exercising a right to net or set off in relation to title transfer collateral.
- CA-4.7.24** In order for collateral to provide protection, the credit quality of the counterparty and the value of the collateral must not have a material positive correlation. For example, securities issued by the counterparty — or by any related group entity — would provide little protection and so would be ineligible.
- CA-4.7.25** Banks must have clear and robust procedures for the timely liquidation of collateral to ensure that any legal conditions required for declaring the default of the counterparty and liquidating the collateral are observed, and that collateral can be liquidated promptly.
- CA-4.7.26** Where the collateral is held by a custodian, banks must take reasonable steps to ensure that the custodian segregates the collateral from its own assets.

### ***Types of Collateral***

- CA-4.7.27** The types of collateral given in the next paragraph are eligible for relief in respect of the above CRM techniques.
- CA-4.7.28**
- (a) Hamish jiddiyyah (security deposit) only for agreements to purchase or lease preceded by a binding promise.
  - (b) Urbun
  - (c) Profit sharing investment account or cash on deposit<sup>13</sup> with the bank which is incurring the exposure

<sup>13</sup> Must be supported by an agreement or documentation that gives bank the right of set-off against the amount of receivables due.



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## **CA-4.7 Credit Risk Mitigation (continued)**

- (d) Sukuk rated by an external rating agency which is issued by:
- (i) Sovereigns and PSEs (treated as sovereigns) with a minimum rating of BB-; or
  - (ii) Issuers other than the above, with a minimum rating of BBB- or A-3 / P-3.
- (e) Sukuk that is unrated by an ECAI but fulfil each of the following criteria:
- (i) issued by an Islamic bank or a conventional bank or a sovereign;
  - (ii) listed on a recognised exchange;
  - (iii) all other rated issues by the Islamic bank or conventional bank of the same seniority of at least BBB - or A-3/P-3 by a recognised ECAI, as determined by the CBB;
  - (iv) the Islamic bank which incurs the exposure or is holding the collateral has no information to suggest that the issue would justify a rating below BBB- or A-3/P-3; and
  - (v) The CBB is sufficiently confident about the market liquidity of the securities.
- (f) Equities and units in collective investment schemes.
- (g) Guarantees issued by third parties that fall within the following categories:
- (i) Sovereigns and central banks;
  - (ii) PSEs;
  - (iii) MDBs;
  - (iv) International organisations/official entities with 0% RW
  - (v) Islamic banks or conventional banks; and
  - (vi) Corporate entities (including insurance and securities firms) either by the parent, subsidiary and affiliates, of a minimum rating of A-.
- (g) Leased assets as stated under “Leased assets used as collateral” above.
- (h) Collateral under “Murabaha” accepted by CBB (see paragraphs CA-3.2.10 and CA-3.2.14).



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## **CA-4.7 Credit Risk Mitigation (continued)**

CA-4.7.29 Any portion of the exposure which is not collateralised shall be assigned the RW of the counterparty.

CA-4.7.30 As stated earlier, banks may opt for either of the two approaches listed below:

### ***The simple approach***

CA-4.7.31 In the simple approach the risk weighting of the collateral instrument collateralising or partially collateralising the exposure is substituted for the risk weighting of the counterparty.

### ***The Standard Supervisory Haircuts approach***

CA-4.7.32 In this approach, when taking collateral, banks must calculate their adjusted exposure to a counterparty for capital adequacy purposes in order to take account of the effects of that collateral. Using haircuts, banks are required to adjust both the amount of the exposure to the counterparty and the value of any collateral received in support of that counterparty to take account of possible future fluctuations in the value of either<sup>14</sup>, occasioned by market movements. This will produce volatility adjusted amounts for both exposure and collateral. Unless either side of the transaction is cash, the volatility adjusted amount for the exposure will be higher than the exposure and for the collateral it will be lower.

CA-4.7.33 Additionally where the exposure and collateral are held in different currencies an additional downwards adjustment must be made to the volatility adjusted collateral amount to take account of possible future fluctuations in exchange rates.

CA-4.7.34 Where the volatility-adjusted exposure amount is greater than the volatility-adjusted collateral amount (including any further adjustment for foreign exchange risk), banks shall calculate their risk-weighted assets as the difference between the two multiplied by the risk weight of the counterparty. The framework for performing these calculations is set out in paragraphs CA-4.7.36 to CA-4.7.38.

CA-4.7.35 Banks must use standard supervisory haircuts given in paragraph CA-4.7.39.

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<sup>14</sup> Exposure amounts may vary where, for example, securities are being lent.



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## **CA-4.7 Credit Risk Mitigation (continued)**

### *Calculation of capital requirement employing the Standard Supervisory Haircuts*

CA-4.7.36 For a collateralised transaction, the exposure amount after risk mitigation is calculated as follows:

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

where:

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

$E$  = current value of the exposure

$H_e$  = haircut appropriate to the exposure

$C$  = the current value of the collateral received

$H_c$  = haircut appropriate to the collateral

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

**CA-4.7.37 The exposure amount after risk mitigation will be multiplied by the risk weight of the counterparty to obtain the risk-weighted asset amount for the collateralised transaction. The treatment for transactions where there is a mismatch between the maturity of the counterparty exposure and the collateral is given in paragraphs CA-4.7.47 to CA-4.7.50.**

CA-4.7.38 Where the collateral is a basket of assets, the haircut on the basket will be  $H = \sum_i a_i H_i$ , where  $a_i$  is the weight of the asset (as measured by units of currency) in the  $i$  basket and  $H_i$  the haircut applicable to that asset.



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## CA-4.7 Credit Risk Mitigation (continued)

### The Standard Supervisory Haircuts

CA-4.7.39 Both the amount of exposure to counterparty and the value of collateral received are adjusted by using standard supervisory haircuts as set out below:

Types of Collateral*	Residual Maturity (yrs)	Haircuts (%)	
		Sovereigns <sup>15</sup>	Others
Cash	All	0	0
Sukuk	≤ 1	0.5	1
Long-term: AAA to AA- and	> 1 to ≤ 5	2	4
Short-term: A-1	> 5	4	8
Sukuk	≤ 1	1	2
Long-term: A+ to BBB- and	> 1 to ≤ 5	3	6
Short-term: A-2 to A-3	> 5	6	12
Sukuk	All	15	15
Long-term: BB+ to BB-			
Sukuk (unrated)	All	25	25
Equities (included in main index)	All	15	15
Equities (not included in main index but listed)	All	25	25
Units in collective investment schemes	All	Depending on the underlying assets as above	Depending on the underlying assets as above
Leased assets used as collateral (except residential real estate - see CA-4.2.19) and other assets	All	≥30	≥30

\* Collateral denominated in different currency will also be subject to additional 8% haircut to cater for foreign exchange risk.

CA-4.7.40 The standard haircut for currency risk where exposure and collateral are denominated in different currencies is 8% (also based on a 10-business day holding period and daily mark-to-market). For transactions in which the bank lends non-eligible instruments (e.g. non- investment grade securities), the haircut to be applied on the exposure should be the same as the one for equity traded on a recognised exchange that is not part of a main index.

<sup>15</sup> Includes PSEs and MDBs



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## **CA-4.7 Credit Risk Mitigation (continued)**

### *The simple approach*

#### *The Minimum conditions*

- CA-4.7.41 For collateral to be recognised in the simple approach, the collateral must be pledged for at least the life of the exposure and it must be marked to market and revalued with a minimum frequency of six months. Those portions of claims collateralised by the market value of recognised collateral receive the risk weight applicable to the collateral instrument. The risk weight on the collateralised portion will be subject to a floor of 20% except under the conditions specified in paragraphs CA-4.7.42. The remainder of the claim should be assigned to the risk weight appropriate to the counterparty.

#### *Exceptions to the risk weight floor*

- CA-4.7.42 The 20% floor for the risk weight on a collateralised transaction will not be applied and a 0% risk weight can be applied where the exposure and the collateral are denominated in the same currency, and either:
- (a) the collateral is cash on deposit; or
  - (b) the collateral is in the form of sovereign/PSE securities eligible for a 0% risk weight, and its market value has been discounted by 20%

#### *Treatment of pools of CRM techniques*

- CA-4.7.43 In the case where a bank has multiple CRM techniques covering a single exposure (e.g. a bank has both collateral and guarantee partially covering an exposure), the bank will be required to subdivide the exposure into portions covered by each type of CRM technique (e.g. portion covered by collateral, portion covered by guarantee) and the risk-weighted assets of each portion must be calculated separately.

#### *Credit Risk Mitigation for Mudarabah Classified as Equity Exposures*

- CA-4.7.44 A placement of funds made under a Mudarabah contract may be subject to a Sharia compliant guarantee from a third party. Such a guarantee relates only to the Mudarabah capital, not to the return. In such cases, the capital should be treated as subject to credit risk with a risk-weighting equal to that of the guarantor provided that the RW of that guarantor is lower than the RW of the Mudarib as a counterparty. Otherwise, the RW of the Mudarib shall apply.
- CA-4.7.45 In Mudarabah investment in project finance, collateralisation of the progress payments made by the ultimate customers can be used to mitigate the exposures of unsatisfactory performance by the Mudarib.



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## **CA-4.7 Credit Risk Mitigation (continued)**

CA-4.7.46 The bank may also place liquid funds with a central bank or another bank on a short-term Mudarabah basis in order to obtain a return on those funds. Such placements serve as an interbank market with maturities ranging from an overnight market up to three months, but the funds may be withdrawn on demand before the maturity date in which case the return is calculated proportionately on the basis of duration and amount. Although from a juristic point of view the amounts so placed do not constitute debts, since (in the absence of misconduct or negligence) Mudarabah capital does not constitute a liability for the institution that acts as Mudarib, in practice the operation of this interbank market requires that the Mudarib should effectively treat them as liabilities. Hence a bank placing funds on this basis may treat them as cash equivalents and, for risk weighting purposes, apply the risk weight applicable to the Mudarib as counterparty.

### ***Maturity mismatches***

CA-4.7.47 For the purposes of calculating risk-weighted assets, a maturity mismatch occurs when the residual maturity of CRM is less than that of the underlying exposure.

CA-4.7.48 The maturity of the underlying exposure and the maturity of the CRM should both be defined conservatively. The effective maturity of the underlying should be gauged as the longest possible remaining time before the counterparty is scheduled to fulfil its obligation, taking into account any applicable grace period.

CA-4.7.49 CRM with maturity mismatches are only recognised when their original maturities are greater than or equal to one year. As a result, the maturity of CRM for exposures with original maturities of less than one year must be matched to be recognised. In all cases, CRM with maturity mismatches will no longer be recognised when they have a residual maturity of three months or less.

CA-4.7.50 When there is a maturity mismatch with recognised credit risk mitigants, the following adjustment will be applied.

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

where:

Pa = value of the credit protection adjusted for maturity mismatch

P = credit protection (e.g. collateral amount, guarantee amount) adjusted for any haircuts

t = min (T, residual maturity of the credit protection arrangement) expressed in years

T = min (5, residual maturity of the exposure) expressed in years.

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## CA-5.1 Trading Book

### *Definition of the Trading Book*

CA-5.1.1 The following definition of the trading book replaces the previous definition.

**CA-5.1.2 A trading book consists of positions in financial instruments and commodities held either with trading intent or in order to hedge other elements of the trading book. To be eligible for trading book capital treatment, financial instruments must either be free of any restrictive covenants on their tradability or able to be hedged completely. In addition, positions should be frequently and accurately valued, and the portfolio should be actively managed (at the present time, open equity stakes in hedge funds, private equity investments and real estate holdings do not meet the definition of trading book, owing to significant constraints on the ability of banks to liquidate these positions and value them reliably on a daily basis. Such holdings must therefore be held in the bank's banking book and treated as equity holding in corporates, except real estate which should be treated as per CA-4.2.27).**

CA-5.1.3 A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments include both primary financial instruments (or cash instruments) and forward financial instruments. 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. 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.

CA-5.1.4 Positions held with trading intent are those held intentionally for short-term resale and/or with the intent of hedging proprietary or client positions.

**CA-5.1.5 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 in this section 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.**





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## CA-5.1 Trading Book (continued)

CA-5.1.6 These policies and procedures should, at a minimum, address the following general considerations:

- (a) The activities the bank considers to be trading and as constituting part of the trading book for regulatory capital purposes;
- (b) The extent to which an exposure can be marked-to-market daily by reference to an active, liquid two-way market;
- (c) For exposures that are marked-to-model, the extent to which the bank can:
  - Identify the material risks of the exposure;
  - Hedge (Sharia compliant hedging) the material risks of the exposure and the extent to which hedging instruments would have an active, liquid two-way market;
  - Derive reliable estimates for the key assumptions and parameters used in the model.
- (d) 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;
- (e) The extent to which legal restrictions or other operational requirements would impede the bank's ability to effect an immediate liquidation of the exposure;
- (f) The extent to which the bank is required to, and can, actively risk manage the exposure within its trading operations; and
- (g) The extent to which the bank may transfer risk or exposures between the banking and the trading books and criteria for such transfers.

The list above 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 firm's trading book.

CA-5.1.7 The following will be the basic requirements for positions eligible to receive trading book capital treatment.

- (a) Clearly documented trading strategy for the position/instrument or portfolios, approved by senior management (which would include expected holding horizon).

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## CA-5.1 Trading Book (continued)

(b) Clearly defined policies and procedures for the active management of the position, which must include:

- Positions are managed on a trading desk;
- Position limits are set and monitored for appropriateness;
- Dealers have the autonomy to enter into/manage the position within agreed limits and according to the agreed strategy;
- Positions are marked to market at least daily and when marking to model the parameters must be assessed on a daily basis;
- Positions are reported to senior management as an integral part of the institution's risk management process; and
- 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.

(c) 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.

### *Prudent valuation guidance*

CA-5.1.8 This section provides banks with guidance on prudent valuation for positions in the trading book. This guidance is especially important for less liquid positions which, although they will not be excluded from the trading book solely on grounds of lesser liquidity, raise CBB's concerns about prudent valuation.

CA-5.1.9 A framework for prudent valuation practices should at a minimum include the following:

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## CA-5.1 Trading Book (continued)

### *Systems and controls*

**CA-5.1.10** Banks must establish and maintain adequate systems and controls sufficient to give management and CBB 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. The reporting line should ultimately be to a main board executive director.

### *Valuation methodologies*

#### **Marking to market**

**CA-5.1.11** Marking-to-market is at least the daily valuation of positions at readily available close out prices that are sourced independently. Examples of readily available close out prices include exchange prices, screen prices, or quotes from several independent reputable brokers.

**CA-5.1.12** Banks must mark-to-market as much as possible. The more prudent side of bid/offer must be used unless the institution is a significant market maker in a particular position type and it can close out at mid-market.

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## CA-5.1 Trading Book (continued)

### Marking to model

- CA-5.1.13 Where marking-to-market is not possible, banks may mark-to-model, where this can be demonstrated to be prudent. Marking-to-model is defined as any valuation which has to be benchmarked, extrapolated or otherwise calculated from a market input.
- CA-5.1.14 When marking to model, an extra degree of conservatism is appropriate. CBB will consider the following in assessing whether a mark-to-model valuation is prudent:
- (a) Senior management should be aware of the elements of the trading book which are subject to mark to model and should understand the materiality of the uncertainty this creates in the reporting of the risk/performance of the business.
  - (b) Market inputs should be sourced, to the extent possible, in line with market prices (as discussed above). The appropriateness of the market inputs for the particular position being valued should be reviewed regularly.
  - (c) Where available, generally accepted valuation methodologies for particular products should be used as far as possible.
  - (d) Where the model is developed by the institution itself, it should be based on appropriate assumptions, which have been assessed and challenged by suitably qualified parties independent of the development process. The model should be developed or approved independently of the front office. It should be independently tested. This includes validating the mathematics, the assumptions and the software implementation.
  - (e) There should be formal change control procedures in place and a secure copy of the model should be held and periodically used to check valuations.
  - (f) Risk management should be aware of the weaknesses of the models used and how best to reflect those in the valuation output.
  - (g) The model should be subject to periodic review to determine the accuracy of its performance (e.g. assessing continued appropriateness of the assumptions, analysis of P&L versus risk factors, comparison of actual close out values to model outputs).
  - (h) Valuation adjustments should be made as appropriate, for example, to cover the uncertainty of the model valuation.

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## CA-5.1 Trading Book (continued)

### Independent price verification

CA-5.1.15 Independent price verification is distinct from daily mark-to-market. It is the process by which market prices or model inputs are regularly verified for accuracy. While daily marking-to-market may be performed by dealers, verification of market prices or model inputs should be performed by a unit independent of the dealing room, at least monthly (or, depending on the nature of the market/trading activity, more frequently). It need not be performed as frequently as daily mark-to-market, since the objective, i.e. independent, marking of positions, should reveal any error or bias in pricing, which should result in the elimination of inaccurate daily marks.

CA-5.1.16 Independent price verification entails a higher standard of accuracy in that the market prices or model inputs are used to determine profit and loss figures, whereas daily marks are used primarily for management reporting in between reporting dates. For independent price verification, where pricing sources are more subjective, e.g. only one available broker quote, prudent measures such as valuation adjustments may be appropriate.

### *Valuation adjustments or reserves*

CA-5.1.17 Banks must establish and maintain procedures for considering valuation adjustments/ reserves. The CBB expects banks using third-party valuations to consider whether valuation adjustments are necessary. Such considerations are also necessary when marking to model.

CA-5.1.18 The CBB expects the following valuation adjustments/reserves to be formally considered at a minimum: unearned profit, close-out costs, operational risks, early termination, investing and funding costs, and future administrative costs and, where appropriate, model risk.

CA-5.1.19 Bearing in mind that the underlying 10-day assumption of the market risk rules may not be consistent with the bank's ability to sell or hedge out positions under normal market conditions, banks must make downward valuation adjustments/reserves for these less liquid positions, and to review their continued appropriateness on an on-going basis. Reduced liquidity could arise from market events. Additionally, close-out prices for concentrated positions and/or stale positions should be considered in establishing those valuation adjustments/reserves. Banks must consider all relevant factors when determining the appropriateness of valuation adjustments/reserves for less liquid positions. These factors may include, but are not limited to, the amount of time it would take to hedge out the position/risks within the position, the average volatility of bid/offer spreads, the availability of independent market quotes (number and identity of market makers), the average and volatility of trading volumes, market concentrations, the aging of positions, the extent to which valuation relies on marking-to-model, and the impact of other model risks.



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## **CA-5.1 Trading Book (continued)**

**CA-5.1.20** Valuation adjustments/reserves made under paragraph CA-5.1.19 must impact Tier 2 regulatory capital and may exceed those made under the relevant accounting standards (IASS, IFRSs or relevant standards issued by AAOIFI whichever are applicable to the Islamic banks).



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## **CA-5.2 Price risk**

CA-5.2.1 The capital charge for price risk is 15% of the amount of the position (carrying value).

CA-5.2.2 For commodities exposure in Salam, the capital charge is computed at 15% of the net position in each commodity, plus an additional charge equivalent to 3% of the gross positions, long plus short, to cover basis risk and forward gap risk. The 3% capital charge is also intended to cater for potential losses in Parallel Salam when the seller in the original Salam contract fails to deliver and the bank has to purchase an appropriate commodity in the spot market to honour its obligation. Net positions in commodities are calculated as explained in section CA-5.6. In case of Istisna'a (see paragraph CA-3.4.24) 15% capital charge on net long or short position plus 3% capital charge on gross positions must apply.



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### **CA-5.3 Equity position risk**

#### ***Introduction***

CA-5.3.1 The minimum capital requirement for equities is expressed in terms of two separately calculated charges, one relating to the “specific risk” of holding a long position in an individual equity, and the other to the “general market risk” of holding a long position in the market as a whole. Where the bank has invested in shares/units of equity funds on Mudaraba financing and the bank has direct exposures in the equities which are traded in a recognised stock exchange, the shares/units are considered to be subject to equity risk. The equity position would be considered to be the net asset value as at the reporting date.

#### ***Specific risk calculation***

CA-5.3.2 Specific risk is defined as the bank’s gross equity positions (i.e. the sum of all equity positions and is calculated for each country or equity market).

CA-5.3.3 The capital charge for specific risk is 8%, unless the portfolio is both liquid and well-diversified, in which case the capital charge will be 4%. To qualify for the reduced 4% capital charge, the following requirements need to be met:

- (a) The portfolio should be listed on a recognised stock exchange;
- (b) No individual equity position shall comprise more than 10% of the gross value of the country portfolio; and
- (c) The total value of the equity positions which individually comprise between 5% and 10% of the gross value of the country portfolio, shall not exceed 50% of the gross value of the country portfolio.

CA-5.3.4 To qualify for reduced 4% capital charge on equity funds, the bank should acquire prior written approval from the CBB.

#### ***General risk calculation***

CA-5.3.5 The general market risk is calculated by first determining the difference between the sum of the long positions and the sum of the short positions (i.e. the overall net position) in each national equity market. In other words, to calculate the general market risk, the bank should sum the market value of its individual net positions for each national market, taking into account whether the positions are long or short.

CA-5.3.6 The general market equity risk measure is 8% of the overall net position in each national market.





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## CA-5.4 Sukuk

### *Specific risk for Sukuk*

**CA-5.4.1** In the case of Sukuk in the trading book, the specific risk charge must be provided on the RW of the issue and the term to maturity of the Sukuk, as follows:

Categories	External credit assessment	Specific risk capital charge
Government (including GCC governments)*	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%
Qualifying	Below B-	12.00%
	Unrated	8.00%
Other		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)
	Similar to credit risk charges under the standardised approach, e.g.:	
	BB+ to BB-	8.00%
	Below BB-	12.00%
	Unrated	8.00%

\* CBB has the discretion to apply a different specific risk weight to sukuk issued by certain foreign government.



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## **CA-5.4 Sukuk (continued)**

### *General market risk for Sukuk*

**CA-5.4.2** The general market risk<sup>16</sup> must be provided on the residual term to maturity or to the next repricing date, using a simplified form of the Maturity Method on the net positions in each time-band in accordance with the table below:

<b>Residual term to maturity</b>	<b>RW</b>
1 month or less	0.00%
1-3 months	0.20%
3-6 months	0.40%
6-12 months	0.70%
1-2 years	1.25%
2-3 years	1.75%
3-4 years	2.25%
4-5 years	2.75%
5-7 years	3.25%
7-10 years	3.75%
10-15 years	4.50%

**CA-5.4.3** In the case of equity investments made by means of a Musharaka or a Mudaraba contract where the underlying assets are commodities, the market risk provisions for commodities, as described below, will be applicable.

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<sup>16</sup> At the CBB's discretion, the bank may alternatively use the duration method as set out in the Market risk section of the Basel II Accord (June 2006).



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## CA-5.5 Foreign exchange risk

### *Introduction*

CA-5.5.1 This section describes the standardised method for calculation of the bank's foreign exchange risk, and the capital required against that risk.

CA-5.5.2 The measurement of the foreign exchange risk involves, as a first step, the calculation of the net open position in each individual currency including gold and/or silver and as a second step, the measurement of the risks inherent in the bank's mix of assets and liabilities positions in different currencies.

**CA-5.5.3 A bank that holds net open positions (whether assets or liabilities) in foreign currencies is exposed to the risk that exchange rates may move against it. The open positions may be either trading positions or, simply, exposures caused by the bank's overall assets and liabilities. Where the bank is involved in option transactions, these must be agreed in advance with the CBB. The CBB will consider the appropriate treatment on a case by case basis.**

CA-5.5.4 The open positions and the capital requirements are calculated with reference to the entire business (i.e. the banking and trading books).

CA-5.5.5 The open positions are calculated with reference to the bank's base currency, which will be either Bahraini Dinars (BD) or United States dollars (USD).

**CA-5.5.6 In addition to foreign exchange risk, positions in foreign currencies may be subject to credit risk which should be treated separately. For the purposes of calculating "Foreign Exchange Risk" only, positions in those GCC currencies which are pegged to US\$, will be treated as positions in US\$.**

### *De Minimis exemptions*

CA-5.5.7 A bank doing negligible business in foreign currencies and which does not take foreign exchange positions for its own account may, at the discretion of the CBB and as evidenced by the CBB's prior written approval, be exempted from calculating the capital requirements on these positions. The CBB is likely to be guided by the following criteria in deciding to grant exemption to any bank:

- (a) The bank's holdings or taking of positions in foreign currencies, including gold and/or silver, defined as the greater of the sum of the gross asset positions and the sum of the gross liability position in all foreign positions and gold and/or silver, does not exceed 100% of its eligible capital; and
- (b) The bank's overall net open position, as defined in CA-5.5.15 does not exceed 2% of its eligible capital.



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## **CA-5.5 Foreign exchange risk (continued)**

CA-5.5.8 The criteria listed above are only intended to be guidelines, and a bank will not automatically qualify for exemptions upon meeting them. Banks doing negligible foreign currency business, which do not take foreign exchange positions for the bank's own account, and wish to seek exemption from foreign exchange risk capital requirements, should submit an application to the CBB, in writing. The CBB will have the discretion to grant such exemptions. The CBB may also, at its discretion, fix a minimum capital requirement for a bank that is exempted from calculating its foreign exchange risk capital requirement, to cover the risks inherent in its foreign currency business.

CA-5.5.9 The CBB may, at a future date, revoke an exemption granted to a bank, if the CBB is convinced that the conditions on which the exemption was granted no longer exist.

### ***Calculation of net open positions***

CA-5.5.10 A bank's exposure to foreign exchange risk in any currency is its net open position in that currency, which is calculated by summing the following items:

- (a) The net spot position in the currency (i.e. all assets items less all liability items, including accrued profit, other income and expenses, denominated in the currency in question; assets are included gross of provisions for bad and doubtful debts, except in cases where the provisions are maintained in the same currency as the underlying assets);
- (b) The net forward position in the currency (i.e. all amounts to be received less all amounts to be paid under forward foreign exchange contracts, in the concerned currency);
- (c) Guarantees and similar off-balance sheet contingent items that are certain to be called and are likely to be irrecoverable where the provisions, if any, are not maintained in the same currency;
- (d) Profits (i.e. the net value of income and expense accounts) held in the currency in question; and
- (e) Specific provisions held in the currency in question where the underlying asset is in a different currency, net of assets held in the currency in question where a specific provision is held in a different currency.

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## CA-5.5 Foreign exchange risk (continued)

**CA-5.5.11** For calculating the net open position in gold and/or silver, the bank must first express the net position (spot plus forward) in terms of the standard unit of measurement (i.e. ounces or grams) and then convert it at the current spot rate into the base currency.

CA-5.5.12 Where gold and/or silver are part of a forward contract (i.e. quantity of gold and/or silver to be received or to be delivered), any foreign currency exposure from the other leg of the contract should be reported.

### *Structural positions*

CA-5.5.13 Positions of a structural nature (i.e. non-dealing), may be excluded from the calculation of the net open currency positions, these include positions related to items that are deducted from the bank's capital when calculating its capital base in accordance with the rules and guidelines issued by the CBB, such as investments denominated in foreign currencies in non-consolidated subsidiaries.

CA-5.5.14 The CBB will consider approving the exclusion of the above positions for the purpose of calculating the capital requirement, only if each of the following conditions is met:

- (a) The concerned bank provides adequate documentary evidence to the CBB which establishes the fact that the positions proposed to be excluded are, indeed, of a structural nature (i.e. non-dealing) and are merely intended to protect the bank's CAR. For this purpose, the CBB may ask written representations from the bank's management or directors.
- (b) Any exclusion of a position is consistently applied, with the treatment of the structural positions remaining the same for the life of the associated assets or other items.

### *Calculation of the overall net open position*

**CA-5.5.15** The net position in each currency is converted at the spot rate, into the reporting currency. The overall net open position must be measured by aggregating the following:

- (a) The sum of the net liabilities positions or the sum of the net asset positions whichever is greater
- (b) The net position (liabilities and assets) in gold and/or silver, regardless of sign.



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## **CA-5.5 Foreign exchange risk (continued)**

CA-5.5.16 Where the bank is assessing its foreign exchange on a consolidated basis, it may be technically impractical in the case of some marginal operations to include the currency positions of a foreign branch or subsidiary of the bank. In such cases, the internal limit for that branch/subsidiary, in each currency, may be used as a proxy for the positions. The branch/subsidiary limits should be added, without regard to sign, to the net open position in each currency involved. When this simplified approach to the treatment of currencies with marginal operations is adopted, the bank should adequately monitor the actual positions of the branch/subsidiary against the limits, and revise the limits, if necessary, based on the results of the ex-post monitoring.

### ***Calculation of the capital charge***

CA-5.5.17 **The capital charge is 8% of the overall net open foreign currency position.**

CA-5.5.18 The table below illustrates the calculation of the overall net open foreign currency position and the capital charge:

**Example of the calculation of the foreign exchange overall net open position and the capital charge**

GBP	DEM	SAR	US\$	JPY	GOLD and/or silver
+200	+100	+70	-190	-40	-50
+370			-230		50

*The capital charge is 8% of the higher of either the sum of the net long currency positions or the sum of the net short positions (i.e. 370) and of the net position in gold and/or silver (i.e. 50) = 420 @ 8% = 33.6*



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## **CA-5.6 Commodities risk**

### ***Introduction***

- CA-5.6.1 This section sets out the minimum capital requirements to cover the risk of holding or taking positions in commodities, including precious metals, but excluding gold and silver (which is treated as a foreign currency according to the methodology explained in section CA-5.5).
- CA-5.6.2 The commodities position risk and the capital charges are calculated with reference to the entire business of a bank (i.e. the banking and trading books combined).
- CA-5.6.3 The price risk in commodities is often more complex and volatile than that associated with currencies. Banks need to guard against the risk that arises when a liability (i.e. in a Parallel Salam transaction) position falls due before the asset position (i.e. a failure associated with or delay in the Salam contract). Owing to a shortage of liquidity in some markets, it might be difficult to close the Parallel Salam position and the bank might be “squeezed by the market”. All these commodity market characteristics can result in price transparency and the effective management of risk.
- CA-5.6.4 All contracts (Salam, Musharakah or Mudarabah) involving commodities as defined in chapters CA-3.3, CA-3.6 and CA-3.7 are subject to commodities risk and a capital charge as per the relevant provisions must be computed.**
- CA-5.6.5 Banks should adopt either the simplified approach to calculate their commodities risk and the resultant capital charges or the maturity ladder approach.

### ***Calculation of commodities positions***

- CA-5.6.6 Banks must first express each commodity position (i.e. Salam and Parallel Salam) in terms of the standard unit of measurement (i.e. barrels, kilograms, grams, etc). Assets and liabilities positions in a commodity are reported on a net basis for the purpose of calculating the net open position in that commodity. For markets which have daily delivery dates, any contracts maturing within ten days of one another may be offset. The net position in each commodity is then converted, at spot rates, into the bank’s reporting currency.**



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<b>CHAPTER</b>	<b>CA-5 Market risk</b>

## **CA-5.6 Commodities risk (continued)**

CA-5.6.7 Positions in different commodities cannot be offset for the purpose of calculating the open-positions as described above. However, where one or more sub-categories<sup>17</sup> of the same category are in effect and are directly deliverable against each other, netting between those sub-categories is permitted. Furthermore, if two or more sub-categories of the same category is considered as close substitutes for each other, and minimum correlation of 0.9 between their price movements is clearly established over a minimum period of one year, the bank may, with the prior written approval of the CBB, net positions in those sub-categories.

**CA-5.6.8 Banks, which wish to net positions based on correlation (in the manner discussed above), must satisfy the CBB of the accuracy of the method which it proposes to adopt.**

### ***Maturity Ladder Approach***

CA-5.6.9 A worked example of the maturity ladder approach is set out in Appendix CA-3 and the table below illustrates the maturity time-bands of the maturity ladder for each commodity.

**CA-5.6.10 The steps in the calculation of the commodities risk by the maturity ladder approach are:**

- (a) The net positions in individual commodities, expressed in terms of the standard unit of measurement, are first slotted into the maturity ladder. Physical stocks are allocated to the first-time band. A separate maturity ladder is used for each commodity.
- (b) Asset and liability positions in the same time-band are matched. The sum of the matched asset and liability positions is multiplied first by the spot price of the commodity, and then by a spread of 1.5% for each time-band as set out in the table below. This represents the capital charge in order to capture all risks within a time-band (which, together, are sometimes referred to as curvature risk).

<sup>17</sup> Commodities can be grouped into clan, families, sub-groups and individual commodities. For example a clan might be Energy Commodities, within which Hydro-Carbons is a family with Crude Oil being a sub-group and West Texas Intermediate, Arabian light and Brent being individual commodities.





<b>MODULE</b>	<b>CA: Capital Adequacy</b>
<b>CHAPTER</b>	<b>CA-5 Market risk</b>

## CA-5.6 Commodities risk (continued)

Time band <sup>18</sup>	
0-1	months
1-3	months
3-6	months
6-12	months
1-2	years
2-3	years
over 3	years

CA-5.6.11 The residual (unmatched) net positions from nearer time-bands are then carried forward to offset opposite positions (i.e. asset against liability and vice versa) in time bands that are further out. However, a surcharge of 0.6% of the net position carried forward is added in respect of each time-band that the net position is carried forward, to recognise that such management of positions between different time-bands is imprecise. The surcharge is in addition to the capital charge for each matched amount created by carrying net positions forward, and is calculated as explained in step (b) above.

CA-5.6.12 At the end of step (c), there will be either asset or liability positions, to which a capital charge of 15% will apply. The CBB recognises that there are differences in volatility between different commodities, but has, nevertheless, decided that one uniform capital charge for open positions in all commodities shall apply in the interest of simplicity of the measurement, and given the fact that banks normally run rather small open positions in commodities. Banks will be required to submit in writing, details of their commodities business in order to capture the market risk on this business and to enable the CBB to evaluate whether the models approach should be adopted by the bank.

<sup>18</sup> Instruments, where the maturity is on the boundary of two maturity time-bands, should be placed into the earlier maturity band. For example, instruments with a maturity of exactly one-year are placed into the 6 to 12 months time-band.



<b>MODULE</b>	<b>CA: Capital Adequacy</b>
<b>CHAPTER</b>	<b>CA-6: Operational Risk</b>

## **CA-6.1 Definition of Operational Risk**

CA-6.1.1 Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events which includes but is not limited to, legal risk and Sharia compliance risk. This definition excludes strategic and reputational risk.

CA-6.1.2 Sharia compliance risk is an operational risk facing Islamic banks which can lead to non-recognition of income and resultant losses.



<b>MODULE</b>	<b>CA: Capital Adequacy</b>
<b>CHAPTER</b>	<b>CA-6: Operational Risk</b>

## **CA-6.2 The Measurement Methodologies**

CA-6.2.1 The framework outlined below presents two methods for calculating operational risk capital charges in a continuum of increasing sophistication and risk sensitivity:

- (a) the Basic Indicator Approach; and
- (b) the Standardised Approach.

CA-6.2.2 A bank will not be allowed to choose to revert to basic indicator approach once it has been approved for standardised approach without CBB's approval. However, if CBB determines that a bank using the standardised approach no longer meets the qualifying criteria for the standardised approach, it may require the bank to revert to the basic indicator approach for some or all of its operations, until it meets the conditions specified by the CBB for returning to the standardised approach.

### ***Basic Indicator Approach***

CA-6.2.3 Banks using the Basic Indicator Approach must hold capital for operational risk equal to the average over the previous three years of a fixed percentage (denoted alpha) of positive annual gross income. Figures for any year in which annual gross income is negative or zero should be excluded from both the numerator and denominator when calculating the average.<sup>19</sup> The charge may be expressed as follows:

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

where:

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

GI = annual gross income, where positive, over the previous three years (audited financial years)

N = number of the previous three years for which gross income is positive

$\alpha$  = 15%, relating the industry wide level of required capital to the industry wide level of the indicator.

<sup>19</sup> If negative gross income distorts a bank's Pillar 1 capital charge, CBB will consider appropriate supervisory action.



<b>MODULE</b>	<b>CA: Capital Adequacy</b>
<b>CHAPTER</b>	<b>CA-6: Operational Risk</b>

## **CA-6.2 The Measurement Methodologies (continued)**

CA-6.2.4 The extent of losses arising from non-compliance with Sharia rules and principles cannot be ascertained owing to the lack of data. Therefore, banks are not required to set aside any additional amount over and above the 15% of average annual gross income over the preceding three years for operational risk.

CA-6.2.5 Gross income is defined as:

- (a) Net income from financing activities which is gross of any provisions, operating expenses, realised profits/losses from the sale of securities in the banking book, and depreciation of Ijarah assets;
- (b) Net income from investment activities; and
- (c) Fee income (e.g. commission and agency fee)

Less:

- (d) Investment account holders' share of income
- (e) Takaful income

In case of a bank with negative gross income for the previous three years, a newly licensed bank with less than 3 years of operations, or a merger, acquisition or material restructuring, the CBB shall discuss with the concerned licensed bank an alternative method for calculating the operational risk capital charge. For example, a newly licensed bank may be required to use the projected gross income in its 3-year business plan. Another approach that the CBB may consider is to require such licensed banks to observe a higher CAR.

CA-6.2.6 Gross income includes income attributable to restricted and unrestricted Profit Sharing Investment Accounts' funds, but excludes extraordinary or exceptional income. Net income from investment activities includes the bank's share of profit from Musharakah and Mudarabah financing activities.

CA-6.2.7 Banks applying this approach are encouraged to comply with the principles set in section OM-8.2 of Operational Risk Management Module.

### ***The Standardised Approach***

CA-6.2.8 In the Standardised Approach, banks' activities are divided into eight business lines: corporate finance, trading & sales, retail banking, commercial banking, payment & settlement, agency services, asset management, and retail brokerage. The business lines are defined in detail in Appendix CA-4. The bank must meet the requirements detailed in section OM-8.3 to qualify for the use of standardised approach.



<b>MODULE</b>	<b>CA: Capital Adequacy</b>
<b>CHAPTER</b>	<b>CA-6: Operational Risk</b>

## **CA-6.2 The Measurement Methodologies (continued)**

**CA-6.2.9** Within each business line, gross income is a broad indicator that serves as a proxy for the scale of business operations and thus the likely scale of operational risk exposure within each of these business lines. The capital charge for each business line is calculated by multiplying gross income by a factor (denoted beta) assigned to that business line. Beta serves as a proxy for the industry-wide relationship between the operational risk loss experience for a given business line and the aggregate level of gross income for that business line. It should be noted that in the Standardised Approach, gross income is measured for each business line, not the whole institution, i.e. in corporate finance, the indicator is the gross income generated in the corporate finance business line.

**CA-6.2.10** The total capital charge is calculated as the three-year average of the simple summation of the regulatory capital charges across each of the business lines in each year. In any given year, negative capital charges (resulting from negative gross income) in any business line can not off-set positive capital charges in other business lines. Where the aggregate capital charge across all business lines within a given year is negative, then the input to the numerator for that year will be zero.<sup>20</sup> The total capital charge may be expressed as:

$$K_{TSA} = \{ \sum_{\text{years 1-3}} \max[(GI_{1-8} \times \beta_{1-8}, 0] \} / 3$$

where:

$K_{TSA}$  = the capital charge under the Standardised Approach

$GI_{1-8}$  = annual gross income in a given year, as defined above in the Basic Indicator Approach, for each of the eight business lines

$\beta_{1-8}$  = a fixed percentage, relating the level of required capital to the level of the gross income for each of the eight business lines.

The values of the betas are detailed below.

<u>Business Lines</u>	<u>Beta Factors (%)</u>
Corporate Finance ( $\beta_1$ )	18
Trading and Sales ( $\beta_2$ )	18
Retail Banking ( $\beta_3$ )	12
Commercial Banking ( $\beta_4$ )	15
Payment and Settlement ( $\beta_5$ )	18
Agency Services ( $\beta_6$ )	15
Asset Management ( $\beta_7$ )	12
Retail Brokerage ( $\beta_8$ )	12

<sup>20</sup> As under the Basic Indicator Approach, if negative gross income distorts a bank's Pillar 1 capital charge under the Standardised Approach, CBB will consider appropriate supervisory action.



<b>MODULE</b>	<b>CA: Capital Adequacy</b>
<b>CHAPTER</b>	<b>CA-7: Profit Sharing Investment Accounts</b>

## **CA-7.1 Profit Sharing Investment Accounts**

CA-7.1.1 This chapter deals with the capital adequacy requirement for assets financed by Profit Sharing Investment Accounts (PSIA), a pool of investment funds placed with an Islamic bank on the basis of Mudarabah.

CA-7.1.2 The PSIA (commonly referred to as “investment accounts” or “special investment accounts”) can be further categorised into:

- (a) Unrestricted PSIA; and
- (b) Restricted PSIA.

CA-7.1.3 The bank has full discretionary powers in making investment decisions for unrestricted PSIA's. However, the placement of funds in restricted PSIA's by the bank is subject to investment criteria specified by the bank, or by the customer, in the Mudarabah contract, or agreed between the investment account holders (IAH) and the bank at the time of contracting.

CA-7.1.4 The bank assumes the role of an economic agent or Mudarib in placing such funds in income-producing assets or economic activities, and as such is entitled to a share (the Mudarib share) in the profits (but not losses) earned on funds managed by it on behalf of the IAH, according to a pre-agreed ratio specified in the Mudarabah contract.

### **Reserves**

CA-7.1.5 The bank can take precautionary steps by setting up prudential reserve accounts to minimise the adverse impact of income smoothing for PSIA on its shareholders' returns and to meet unexpected losses (UL) that would be borne by the IAH on investments financed by PSIA, namely:

- Profit equalisation reserve (PER)

PER comprises of allocations from the gross income<sup>21</sup> of the Mudarabah to be available for smoothing returns paid to the investment account holders and the shareholders, and consists of a PSIA portion and a shareholder's portion; and/or

- Investment risk reserve (IRR)

IRR comprises amounts appropriated out of the income of investment account holders after deduction of the Mudarib share of income, to meet any potential future losses on the investments financed by the PSIA.

<sup>21</sup> In some countries, the appropriation of income is to be made out of after tax income.



MODULE	CA: Capital Adequacy
CHAPTER	CA-8: Gearing requirements

## CA-8.1 Gearing

**CA-8.1.1** The content of this Chapter is applicable to locally incorporated banks and Bahrain retail bank branches of foreign banks.

### *Measurement*

**CA-8.1.2** The Gearing ratio is measured with reference to the ratio of deposit liabilities against the bank's capital and reserves as reported in its PIRI.

### *Gearing limit*

**CA-8.1.3** For Retail Bank and Wholesale bank licensees, deposit liabilities should not exceed 20 times the respective bank's capital and reserves.