



GUIDELINES ON RISK WEIGHTED ASSETS

PARTS	TABLE OF CONTENTS	PAGE NO.
PART A	OVERVIEW.....	[1]
A.1	INTRODUCTION.....	[1]
A.2	APPLICABILITY.....	[2]
A.3	LEGAL PROVISION.....	[3]
A.4	EFFECTIVE DATE.....	[3]
A.5	LEVEL OF APPLICABILITY.....	[3]
A.6	PRIOR APPROVAL REQUIRED.....	[4]
PART B	CREDIT RISK.....	[5]
B.1	INTRODUCTION.....	[5]
B.2	THE STANDARDISED APPROACH FOR CREDIT RISK.....	[6]
B.2.1	EXTERNAL CREDIT ASSESSMENTS.....	[6]
B.2.2	DEFINITION OF EXPOSURES.....	[9]
	Exposures to Sovereigns and Central Banks.....	[10]
	Exposures to Non-Federal Government Public Sector Entities (PSEs)..	[11]
	Exposures to Multilateral Development Banks (MDBs).....	[12]
	Exposures to Banking Institutions and Corporates.....	[12]
	Exposures to Insurance Companies, Securities Firms and Fund Manager.....	[14]
	Exposures Included in the Regulatory Retail Portfolio.....	[14]
	Loans Secured by Residential Properties.....	[15]
	Defaulted Exposures.....	[17]
	Higher Risk Assets.....	[18]
	Other Assets.....	[19]
B.2.3	TREATMENT FOR THE COMPUTATION OF CREDIT RISK-WEIGHTED ASSETS FOR ISLAMIC CONTRACTS.....	[20]
	<i>MURĀBAHAH</i>	[20]
	<i>BAI' BITHAMAN AJIL (BBA) AND BAI' INAH</i>	[22]
	<i>SALAM</i>	[22]
	<i>ISTISNĀ`</i>	[24]
	<i>IJĀRAH</i>	[25]
	<i>MUSHĀRAKAH</i>	[27]
	<i>MUDĀRABAH</i>	[31]
	<i>SUKŪK</i>	[33]
	<i>QARDH</i>	[34]
B.2.4	OFF-BALANCE SHEET ITEMS.....	[34]
B.2.5	CREDIT RISK MITIGATION.....	[37]

PARTS	TABLE OF CONTENTS	PAGE NO.
	Minimum Conditions for the Recognition of Credit Risk Mitigation Techniques.....	[38]
	Credit Risk Mitigation Techniques.....	[39]
	Other Aspects of Credit Risk Mitigation.....	[61]
PART C	OPERATIONAL RISK.....	[64]
C.1	INTRODUCTION.....	[64]
C.1.1	SOUND PRACTICES FOR OPERATIONAL RISK MANAGEMENT....	[64]
C.1.2	TOTAL OPERATIONAL RISK CAPITAL CHARGE.....	[65]
C.2	THE BASIC INDICATOR APPROACH (BIA).....	[65]
PART D	MARKET RISK.....	[69]
D.1	INTRODUCTION.....	[69]
	Scope of the Capital Charges.....	[69]
	Approaches of Measuring Market Risks.....	[70]
	Standardised Approach.....	[70]
D.1.1	PRUDENT VALUATION GUIDANCE.....	[70]
	Systems and Controls.....	[70]
	Valuation Methodologies.....	[71]
	Independent Price Verification.....	[72]
	Valuation Adjustments.....	[73]
D.1.2	CLASSIFICATION OF FINANCIAL INSTRUMENTS.....	[73]
	Trading Book Policy Statement.....	[73]
	Definition of Trading Book.....	[75]
	Classification of Specific Financial Instruments.....	[77]
D.1.3	TREATMENT OF MONEY MARKET INSTRUMENTS IN TRADING BOOK.....	[78]
	Controls to Prevent Regulatory Capital Arbitrage.....	[78]
	Treatment of Hedging Positions.....	[79]
D.1.4	TREATMENT OF COUNTERPARTY CREDIT RISK IN TRADING BOOK.....	[81]
	Credit Derivatives.....	[82]
D.2	THE STANDARDISED MARKET RISK APPROACH.....	[83]
D.2.1	INTEREST/PROFIT RATE RISKS.....	[83]
	Specific Risk.....	[84]
	Specific Risk Capital Charges for Issuer Risk.....	[84]
	Specific Risk Capital Charges for Positions Hedged by Credit Derivatives.....	[86]

PARTS	TABLE OF CONTENTS	PAGE NO.
	General Interest/Profit Rate Risk.....	[88]
	Offsetting of Matched Positions.....	[90]
	Maturity Method.....	[90]
	Vertical Disallowance.....	[91]
	Horizontal Disallowance.....	[92]
	Duration Method.....	[94]
	Treatment of Interest/Profit Rate Derivatives, Repo and Reverse Repo Transactions.....	[95]
	Example 1: Calculation of General Risk (Maturity Method) for Interest/Profit Rate Related Financial Instruments.....	[101]
D.2.2	EQUITY POSITION RISK.....	[105]
	Specific and General Risk.....	[105]
	Specific Risk.....	[105]
	General Risk.....	[106]
	Treatment of Equity Derivatives.....	[107]
	Offsetting of Matched Equity Derivative Positions.....	[108]
	Arbitrage.....	[108]
	Example 2: Calculation of Equity Risk for Equity Arbitrage Strategies.....	[110]
D.2.3	FOREIGN EXCHANGE RISK (INCLUDING GOLD AND SILVER POSITIONS).....	[111]
	The Treatment of Structural Positions.....	[112]
	Measuring the Exposure in a Single Currency.....	[113]
	The Treatment of Interest/Profit, Other Income and Expenses in Foreign Currency.....	[114]
	Measuring the Foreign Exchange Risk in a Portfolio of Foreign Currency Positions.....	[114]
D.2.4	COMMODITIES RISK.....	[115]
	Simplified Approach.....	[117]
	Maturity Ladder Approach.....	[117]
	Models for Measuring Commodities Risk.....	[119]
	Example 3: Maturity Ladder Approach for Commodities Risk.....	[119]
D.2.5	TREATMENT OF OPTIONS.....	[122]
	Underlying Position Approach.....	[123]
	Simplified Approach.....	[124]
	Delta-Plus Method.....	[125]
	Scenario Approach.....	[128]
	Example 4: Delta-Plus Methods for Options.....	[130]

PARTS	TABLE OF CONTENTS	PAGE NO.
	Example 5: The Scenario Approach for Options.....	[137]
PART E	LARGE EXPOSURE RISK REQUIREMENTS.....	[142]
E.1	LERR FOR BANKING INSTITUTIONS.....	[142]
PART F	SECURITISATION FRAMEWORK.....	[143]
F.1	INTRODUCTION.....	[143]
F.2	OPERATIONAL REQUIREMENTS FOR CAPITAL RELIEF.....	[145]
F.2.1	Operational Requirements for Traditional Securitisations.....	[146]
F.2.2	Operational Requirements for Synthetic Securitisations.....	[147]
F.3	STANDARDISED APPROACH FOR SECURITISATION EXPOSURES.....	[149]
F.3.1	TREATMENT OF ON-BALANCE SHEET SECURITISATION EXPOSURES.....	[149]
F.3.2	TREATMENT OF OFF-BALANCE SHEET SECURITISATION EXPOSURES.....	[150]
F.3.3	TREATMENT OF OVERLAPPING EXPOSURES.....	[151]
F.3.4	TREATMENT OF COUNTERPARTY CREDIT RISK FOR SECURITISATION EXPOSURES.....	[152]
F.3.5	TREATMENT OF SECURITISATION OF REVOLVING UNDERLYING EXPOSURES WITH EARLY AMORTISATION PROVISIONS.....	[152]
F.3.6	TREATMENT OF CREDIT RISK MITIGATION FOR SECURITISATION EXPOSURES.....	[157]
F.4	OTHER OPERATIONAL REQUIREMENTS.....	[159]
F.4.1	OPERATIONAL REQUIREMENTS AND TREATMENT OF CLEAN-UP CALLS.....	[159]
F.4.2	TREATMENT FOR IMPLICIT SUPPORT.....	[160]
F.4.3	ELIGIBLE OFF-BALANCE SHEET SECURITISATION EXPOSURES	[161]
F.4.4	REQUIREMENTS FOR USE OF EXTERNAL RATINGS.....	[162]
APPENDICES		
Appendix I	Areas of National Discretion.....	[166]
Appendix II	Eligibility Criteria for External Credit Assessment Institution (ECAI) Recognition.....	[169]
Appendix III	Risk Weights and Rating Categories.....	[175]
Appendix IV	Summary of Risk Weights for Loans Secured by Residential Mortgages.....	[179]
Appendix V	Definition of Default.....	[180]

PARTS	TABLE OF CONTENTS	PAGE NO.
Appendix Va	Diagrammatic Illustration of Re-ageing via Restructuring.....	[183]
Appendix VI	Illustration on Risk-Weighted Asset (RWA) Calculation for Defaulted Exposures and Exposures Risk-Weighted at 150%.....	[184]
Appendix VII	Minimum Requirements on Supervisory Slotting Criteria Method.....	[186]
Appendix VIIa	Supervisory Slotting Criteria for Specialised Lending/Financing Exposures.....	[191]
Appendix VIII	Counterparty Credit Risk and Current Exposure Method.....	[214]
Appendix VIIla	Sample Computation of the Capital Requirement and Exposure at Default (EAD) for a Portfolio of Derivative Contracts.....	[222]
Appendix VIIIb	“Add-on” Factors for Derivatives Contracts.....	[223]
Appendix VIIIc	Example for Calculation of Residual Maturity (for Forward Rate Agreements and Over-The-Counter Interest Rate Contracts of Similar Nature which are Settled in Cash on Start Date).....	[226]
Appendix VIId	Discount Factor and Range of Residual Maturity.....	[227]
Appendix IX	Capital Treatment for Failed Trades and Non-DvP Transactions....	[228]
Appendix X	List of Recognised Exchanges*.....	[231]
Appendix XI	Recognition Criteria for Physical Collateral Used For Credit Risk Mitigation Purposes of Islamic Banking Exposures.....	[233]
Appendix XII	Summary Table of Gross Income Computation.....	[239]
Appendix XIII	Illustration of Computation of Exposures with Credit Risk Mitigation Effects.....	[241]
Appendix XIV	Illustration of Computation of Large Exposure Risk Requirement	[247]
Appendix XV	Capital Treatment for Sell and Buyback Agreement (SBBA)/Reverse SBBA Transactions.....	[250]
Appendix XVI	Securitisation Framework – Definitions and General Terminology	[252]
Appendix XVII	Capital treatment for Investment Accounts.....	[257]
Appendix XVIII	Illustration on the treatment of underwriting exposures.....	[259]
Appendix XIX	Capital Treatment for Credit Derivatives in the Trading Book.....	[261]

PART A OVERVIEW

A.1 INTRODUCTION

- 1.1 This document is part of the Banking Capital Adequacy Framework (BCAF) that specify the approaches for quantifying the Risk Weighted Assets (RWA) for credit risk, market risk and operational risk, as follows:

	Risk Type	Permissible Approaches
1.	Credit	Standardised Approach
2.	Market	Standardised Approach
3.	Operational	Basic Indicator Approach (BIA)

It should be read together with the Guidelines on Capital Components.

- 1.2 The computation of the risk-weighted assets is consistent with Pillar 1 requirements set out by the Basel Committee on Banking Supervision (BCBS) and the Islamic Financial Services Board (IFSB) in their respective documents - “International Convergence of Capital Measurement and Capital Standards: A Revised Framework” issued in June 2006 (Basel II). **Appendix I** summarises the options exercised by Labuan FSA, to be consistent with the options exercised by the domestic supervisory authority i.e. Bank Negara Malaysia (BNM), particularly in areas where national discretion is provided by the BCBS to the national supervisory authority.
- 1.3 The requirements set out by the BCBS are intended to improve the overall risk sensitivity of the capital adequacy framework. However, they may not be sufficient to reflect the actual risk profile of Labuan banks operating in emerging markets.
- 1.4 While Labuan FSA believes that such customisation could be justified, a pragmatic approach is adopted for implementation. Higher prudential requirements and risk management standards would be introduced gradually taking into consideration industry feedback during the consultation process. Similarly, prioritisation and timing

for the introduction of additional adjustments or customisation would be determined based on the long-term benefits of promoting prudent practices within the industry.

- 1.5 As we gain more reliable data and experience over time, a more thorough assessment would also be undertaken to consider the introduction of other adjustments as deemed necessary by Labuan FSA. It is important to emphasise that Labuan FSA may also exercise its discretion under the Supervisory Review Process, or Pillar 2 to impose higher capital requirements or prudential standards on individual institutions if Labuan FSA is of the view that the actual risk profiles of these institutions are significantly underestimated by the framework are not satisfactory.
- 1.6 Notwithstanding the requirements under the capital adequacy framework, a fundamental supervisory expectation is for all Labuan banks to have in place comprehensive risk management policies and processes that effectively identify, measure, monitor and control risks exposures of the institution and is subjected to appropriate board and senior management oversight. This supervisory expectation is further detailed in the guidelines on Corporate Governance and other relevant risk management standards and requirements set by Labuan FSA. The assessment on the adherence to the standards and requirements set by Labuan FSA would be a key component of the overall supervisory review process in determining appropriate supervisory actions against Labuan banks.

A.2 APPLICABILITY

- 1.7 The Guidelines is applicable to all Labuan banks licensed under Part VI of the Labuan Financial Services and Securities Act 2010 (LFSSA).
- 1.8 Under the Guidelines, the term “Labuan bank(s)” refers collectively to all Labuan banking licensees as specified under paragraph 1.7.

1.9 With the implementation of the Guidelines, the requirements under the following Guidelines will be superseded after the effective date under paragraph 1.12(ii):

- (i) Guidelines on Risk-Weighted Capital Adequacy issued on 23 April 1997;
- (ii) Guidelines on Risk-Weighted Capital Adequacy issued on 29 September 1997;
- (iii) Guidelines on Risk-Weighted Capital Ratio (RWCR) for Subsidiary Banks issued on 10 March 2006; and
- (iv) Guidelines on RWCR for Subsidiary Banks issued on 7 July 2009.

A.3 LEGAL PROVISION

1.10 The Guidelines is issued pursuant to Section 4A of the Labuan Financial Services Authority Act 1996 (LFSSA) for the purpose clarifying prudential standards to be observed by Labuan banks licensed under Part VI of LFSSA.

1.11 Any Labuan Banks which fail to comply with the Guidelines will be guilty an offence punishable under Section 36B and 36G of LFSSA.

A.4 EFFECTIVE DATE

1.12 The Guidelines will be implemented based on the indicated timeline and would remain effective and applicable unless amended or revoked:

- (i) 1 July 2017 to 30 June 2018: one-year parallel run; and
- (ii) 1 July 2018: the effective date for the compliance to the requirements.

A.5 LEVEL OF APPLICABILITY

1.13 A Labuan bank is required to comply with the Banking Capital Adequacy Framework at the following levels:

- i) Entity level¹, referring to the global operations of the Labuan bank (i.e. including its overseas branch operations) on a standalone basis; and
- ii) Consolidated level, which includes entities covered under the entity level requirement, and the consolidation² of all subsidiaries, except insurance and takaful subsidiaries which shall be deducted in the calculation of Common Equity Tier 1 Capital³.

1.14 For avoidance of doubts, Labuan banks that have been approved by Labuan FSA to conduct Islamic window operations may comply with the requirements under the Guidelines and the Guidelines on Capital Components at the level of such windows by considering the conventional capital at parent's or head office's level, meeting the requirements as specified by Labuan FSA.

1.15 The requirements of the Guidelines are not applicable to Labuan banks operating as branches.

A.6 PRIOR APPROVAL REQUIRED

1.16 In relation to any application which requires prior approval by Labuan FSA, Labuan banks shall submit the application to Labuan FSA's Supervision and Monitoring Department as follows:

Director
Supervision and Monitoring Department
Labuan Financial Services Authority (Labuan FSA)
Level 17, Main Office Tower,
Financial Park Complex
87000 Federal Territory of Labuan, Malaysia

Telephone no: 087 591 200
Facsimile no: 087 453 442 / 413 328
Email: *sed@labuanfsa.gov.my*

¹ Also referred to as the "solo" or "stand-alone" level.

² In accordance with the Malaysian Financial Reporting Standards (MFRS) and the international acceptable accounting standards as stipulated in the Directive on Financial Reporting Standards for Labuan Financial Institutions issued by Labuan FSA.

³ In accordance with paragraph 26 of the Guidelines on Capital Components.

PART B CREDIT RISK

B.1 INTRODUCTION

- 2.1 This part outlines the standardised approach for the computation of the capital requirements for credit risk.
- 2.2 Under the standardised approach for credit risk, the determination of the capital requirements is based on an approach that links predefined risk weights to predefined sets or classes of assets as defined from paragraph 2.12 to 2.43 of the Guidelines. Significant differences to the Basel II are in the following areas:
- i. The use of external ratings issued by recognised external credit assessment institutions (ECAIs) in determining the risk weights of the Labuan banks' exposures to certain types of borrowers/counterparties, such as corporates and banking institutions. The use of such ratings are subject to specific rules set out from paragraphs 2.3 to 2.11;
 - ii. Greater recognition of credit risk mitigation in the form of on-balance sheet netting arrangements, credit protection through financial collateral as well as guarantees and credit derivatives; and
 - iii. The introduction of new portfolio segments and risk weights. A retail portfolio segment with a risk weight of 75% has been introduced under the standardised approach. Nevertheless, the application of these risk weights will be subject to the Labuan banks fulfilling all the specified operational requirements.

Whilst the standardised approach specifies the applicable risk weight for a particular exposure, as a general rule under Pillar 2, Labuan FSA reserves the right to exercise its discretion to apply a different risk weight to a particular Labuan bank or group of Labuan banks, (which may be higher) from that specified under the Guidelines in certain circumstances such as in situations where there is enough evidence to suggest that loss experience in a particular band or asset class had increased or that overall asset quality of such institutions have been deteriorating.

B.2 THE STANDARDISED APPROACH FOR CREDIT RISK

B.2.1 EXTERNAL CREDIT ASSESSMENTS

- 2.3 External credit assessments (or external ratings) on the borrower (the issuer) or specific securities issued by the borrower (the issue) are the basis for the determination of risk weights under the standardised approach for exposures to sovereigns, central banks, public sector entities, banks, corporates as well as certain other specific portfolios. For this purpose, Labuan banks are only allowed to use external ratings provided by ECAs that have been recognised by Labuan FSA⁴ based on the eligibility criteria as stipulated in Appendix II. External ratings are not used for determining the risk weights for residential mortgages, regulatory retail portfolios, non-performing loans, high risk exposures as well as specifically identified borrowers/transactions as specified in paragraph 2.42 and any other assets not specified as mentioned in paragraph 2.43.
- 2.4 Under the Guidelines, an exposure would be deemed to have an external rating if the issuer or the issue has a rating provided by an external credit assessment institution (ECAI) that has been recognised by Labuan FSA. In cases where an exposure does not have an issuer or issue rating, the exposure shall be deemed unrated and shall be accorded a risk weight appropriate for unrated exposures in their respective exposure category. However, there may be instances where an unrated exposure can be risk-weighted based on the rating of an equivalent exposure to the particular borrower. The treatment of these unrated exposures will be subject to conditions specified in paragraph 2.8.

⁴ A list of recognised ECAs, including the mapping of the rating categories of different ECAs to the risk weights, is provided in Appendix III and may be updated from time to time.

General Requirements on the Use of External Ratings

2.5 The use of external ratings for capital adequacy purposes must be applied on a consistent basis. In addition, there should not be ‘cherry picking’⁵ of external ratings. Labuan banks must ensure that:

- i. external rating announcements are closely monitored (especially for borrowers which are placed under ‘watch’ by the ECAs);
- ii. risk weights are revised promptly following any changes in external ratings; and
- iii. all reports on the capital adequacy position under this framework that are submitted to Labuan FSA reflect the latest ratings assigned to the issuers or issues.

The use of external ratings for risk weighting of exposures would also be subject to the disclosure requirements under Pillar 3, failing which the external ratings shall not be used for purposes of capital adequacy computation. In this event, all exposures shall be treated as being unrated.

Level of Application of the Assessment

2.6 External ratings for one entity within a corporate group cannot be used to risk weight other entities within the same group.

Single and Multiple Assessments

2.7 There are cases where a borrower/securities issuer or securities are rated by more than one ECAI. In such cases, all available external ratings of a borrower or an issue from recognised ECAs must be captured and the following rules must be observed:

⁵ Labuan banks shall not ‘cherry pick’ external ratings for capital adequacy purposes. For example, Labuan banks should not use external ratings only when the ratings provide a favourable risk weight compared to an unrated exposures and ignore the external ratings in situations where the risk weight is unfavourable.

- i. Where 2 recognised external ratings are available, the lower rating is to be applied; or
- ii. Where 3 or more recognised external ratings are available, the lower of the highest 2 ratings will be used for the capital adequacy calculation purposes.

Issuer and Issues Assessment

2.8 Where a Labuan bank invests in a particular security which has an issue-specific rating, the risk weight for this exposure will be based on this rating assessment. Where the Labuan bank has an investment which does not have an issue-specific rating, the following principles shall apply:

- i. In the event where the Labuan banks' exposure is to a counterparty which does not have its own issuer rating, but the same counterparty has a rating on other obligations such as a debt security which the Labuan bank is not exposed to, the Labuan bank is able to use that debt security rating in determining the appropriate risk weight for their exposure to the counterparty. However, this is subject to the condition that the Labuan bank's unrated exposure ranks pari passu or senior in all respects to the debt security which has a rating and the debt security rating has not taken into account any effects of collateral/guarantee arrangements. Otherwise, the unrated exposure will receive the risk weight for unrated exposures;
- ii. Where a counterparty has its own issuer rating, this assessment typically applies to senior unsecured exposures on that counterparty. Thus, only senior exposures on that counterparty will be able to utilise this rating. Other exposures will be treated as unrated; and
- iii. In the event that either the counterparty or a single security has a low quality rating which maps into a risk weight equal to or higher (for example 150%) than that which applies to unrated exposures (100%), an unrated exposure on the same counterparty will be assigned the same risk weight as is applicable to the low quality rating (instead of the risk weight for unrated exposures).

- 2.9 No supervisory recognition of credit risk mitigation techniques will be taken into account if credit enhancements have already been reflected in the rating specific to a particular debt security (to avoid double counting of credit enhancement factors). For example, if an external rating for a specific issue has already taken into account the effects of a guarantee attached to the issuance, the guarantee cannot be subsequently be taken into consideration for purposes of credit risk mitigation.

Malaysian Currency and Foreign Currency Assessments

- 2.10 Where unrated exposures are risk-weighted based on the rating of an equivalent exposure to a particular borrower, foreign currency ratings would be used for exposures in foreign currency. Malaysian currency ratings would only be used to risk weight unrated exposures denominated in Malaysian currency, where permissible.

Unsolicited Ratings

- 2.11 Labuan banks should only use solicited ratings from recognised ECAs for purposes of the capital adequacy computation under the standardised approach. This, however, does not preclude Labuan banks from using unsolicited ratings for other internal risk management purposes.

B.2.2 DEFINITION OF EXPOSURES

- 2.12 The following part defines the various categories of exposures and their corresponding risk weights under the standardised approach. The risk weights would be applicable to all on-balance sheet and off-balance sheet exposures in the banking book of Labuan banks. Exposures in the trading book shall be subject to the requirements under the market risk component of the Guidelines. For exposures undertaken through the Islamic banking contracts, the treatment for the computation of the risk-weighted assets is provided in Part B.2.3 Treatment for the Computation of Credit Risk-weighted Assets for Islamic Contracts.

- 2.13 On-balance sheet exposures shall be multiplied by the appropriate risk weight to determine the risk-weighted asset amount, while off-balance sheet exposures shall be multiplied by the appropriate credit conversion factor (Part B.2.4 Off-Balance Sheet Items) before applying the respective risk weights.
- 2.14 For purposes of capital adequacy computation, exposures are defined as assets and contingent assets under the applicable Financial Reporting Standards, net of specific provisions⁶.

Exposures to Sovereigns and Central Banks

- 2.15 Exposures to, or explicitly and unconditionally guaranteed by, the Federal Government of Malaysia and BNM⁷, shall be accorded a preferential risk weight of 0%.
- 2.16 Where another national supervisor has accorded a preferential risk weight (that is 0% or 20%) for exposures to their sovereign (or central bank), denominated and funded in their local currency, Labuan banks can also apply the preferential risk weight on these exposures. Similarly, where an explicit guarantee has been provided by these sovereigns (or central banks), the preferential risk weight can also be applied. However, in circumstances where Labuan FSA deems the preferential risk weight to be inappropriate, Labuan FSA reserves the right to require these sovereign exposures to be risk-weighted based on the sovereign's external rating.

⁶ Specific provisions include individual impairment provisions, as well as collective impairment provisions (and regulatory reserves, if any) that are attributable to loans classified as impaired. Individual and collective impairment provisions are as defined under the recognised Financial Reporting Standards specified under the Directive on Financial Reporting Standards for Labuan Licensed Entities.

⁷ Including securities issued through special purpose vehicles established by BNM e.g. Bank Negara Malaysia Sukuk Ijarah and BNMNi-Murabahah issued through BNM Sukuk Berhad. However, Labuan banks shall apply the look-through approach as Appendix XVII for BNM *Mudarabah* Certificate (BMC).

2.17 Exposures to sovereigns (or central banks) not falling under the categories set out in paragraphs 2.15 and 2.16⁸, shall be risk-weighted based on the external credit rating of the sovereigns as given in **Appendix III**.

Exposures to Non-Federal Government Public Sector Entities (PSEs)

2.18 Exposures to Malaysian PSEs will be risk-weighted at 20% if all of the following criteria are met:

- i. the PSE has been established under its own statutory act;
- ii. the PSE and its subsidiaries are not involved in any commercial undertakings;
- iii. a declaration of bankruptcy against the PSE is not possible; and
- iv. the PSE is mostly funded by the federal government and any lending facilities obtained by the PSE are subjected to strict internal lending rules by the PSE.

2.19 In general, Malaysian PSEs would include administrative bodies of the federal government as well as state governments, local governments and administrative bodies of these entities.

2.20 PSEs⁹ that do not fulfill all criteria in paragraph 2.18, shall be risk-weighted based on their external ratings as per corporates (Refer to paragraph 2.23).

2.21 In cases where other national supervisors have accorded a preferential risk weight to their local PSEs, banking institutions can also apply the preferential risk weight on their exposures to these foreign PSEs provided these exposures are denominated and funded in their local currency. In addition, the criteria established by the national supervisor in determining the eligible PSEs for the preferential risk weight should also be aligned with the criteria specified above for Malaysian PSEs. However, in circumstances where the preferential risk weight to a foreign PSE is deemed inappropriate, Labuan FSA reserves the right to require exposures to the PSE to be risk-weighted based on its external rating.

⁸ Such as bonds issued by Federal Government of Malaysia denominated in USD.

⁹ This would include quasi-government agencies.

Exposures to Multilateral Development Banks (MDBs)

2.22 Exposures to MDBs shall in general be treated similar to exposures to banking institutions. However, highly-rated MDBs which meet certain criteria that have been specified by the BCBS will be eligible for a preferential risk weight of 0%¹⁰.

Exposures to Banking Institutions and Corporates

2.23 Exposures to banking institutions and corporates shall be accorded risk weights based on their external ratings which can be in the form of either long-term or short-term ratings. However, any exposure arising from specific and loss-bearing fund placements/deposits made with Islamic banks or Islamic banking operations shall be subject to the 'look-through' approach as described in **Appendix XVII**. As a general rule, no exposures to an unrated banking institution or corporate shall be given a risk weight preferential¹¹ to that assigned to its sovereign of incorporation.

Short-term Ratings

2.24 Short-term ratings¹² are deemed to be facility-specific, thus can only be used to determine risk weights for exposures specific to a rated facility. In addition, short-term ratings cannot be used to risk weight an unrated long term exposure. The treatment for specific short-term facilities, such as a particular issuance of a commercial paper is given in **Appendix III**. In addition, the application of short-term ratings shall be guided by the following requirements:

¹⁰ MDBs currently eligible for a 0% risk weight are the World Bank Group, which comprises 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), and the Council of Europe Development Bank (CEDB), and the International Finance Facility for Immunisation (IFFIm).

¹¹ For example, if the sovereign rating for a particular country was BBB, any exposures to the sovereign would be accorded a risk weight of 50% and any unrated exposures to corporates incorporated in that sovereign would be assigned a risk weight of 50% or higher.

¹² In general, short-term ratings assessments refer to ratings for facilities with an original maturity of 1 year or less.

- i. where a Labuan bank has multiple short-term exposures to a particular borrower and only one of these facilities has a short-term facility rating which attracts a 50% risk weight, other unrated short-term exposures on the borrower cannot attract a risk weight lower than 100%;
- ii. where an issuer is accorded a risk weight of 150% for one short-term facility, all unrated exposures of the issuer, whether long-term or short term, shall also attract a 150% risk weight, unless a recognised credit risk mitigant is available; and
- iii. the Labuan bank ensures that when a short-term rating is used, the ECAI making the assessment has met all of the eligibility criteria specified by Labuan FSA in terms of its short-term rating. (i.e. Labuan FSA has not communicated the withdrawal of such recognition).

All other exposures shall use the long-term ratings or be treated as unrated exposures.

Long-term Ratings

2.25 The applicable risk weights for long-term ratings for exposures to banking institutions and corporates are provided in **Appendix III**. The following treatment are specifically provided for exposures to banking institutions:

- i. a risk weight that is one category more favourable is applied to claims on banking institutions with an original¹³ maturity of six (6) months or less, subject to a floor of 20%. This treatment is available to both rated and unrated exposures, but not to banking institutions risk-weighted at 150%; and
- ii. a risk weight of 20% shall be applied to exposures to other banking institutions with an original maturity of three (3) months or less.

¹³ Labuan banks must ensure that exposures which are expected to be rolled-over beyond their original maturity do not qualify for this more favourable treatment. This is based on the view that Labuan banks rolling-over their facilities are having difficulty to source for alternative funding. This shall also be applicable for exposures that have been accorded the automatic 20% risk weight.

2.26 Exposures on development financial institutions (DFIs) shall be treated similar to the exposures to banking institutions.

Exposures to Insurance Companies, Securities Firms and Fund Managers

2.27 Exposures to insurance companies, securities firms, unit trust companies and other asset management companies shall be treated as exposures to corporates.

Exposures Included in the Regulatory Retail Portfolio

2.28 Exposures included in the regulatory retail portfolio (excluding qualifying residential mortgage loans and defaulted regulatory retail exposures) shall be risk-weighted at 75% only when the following criteria are met:

- i. orientation criterion - exposure is to an individual person or persons or to a small business. (Small businesses may include sole- proprietorships, partnerships or small and medium-sized enterprises (SMEs¹⁴));
- ii. product criterion - the exposure takes the form of any of the following: revolving credits and lines of credit, personal term loans and other term loans and small business facilities. Investment in debt and equity securities, whether listed or not, are excluded from this portfolio. Qualifying residential mortgage loans would be treated separately under paragraphs 2.30 to 2.34.

¹⁴ Small and medium-sized enterprises (SMEs) in the agriculture and services sector are defined as having annual sales of up to the equivalent of RM5 million or 50 full-time employees. For the manufacturing sector, SMEs have been defined as having annual sales of up to the equivalent of RM25 million or 150 full-time employees.

- iii. granularity criterion¹⁵ - the aggregate exposure¹⁶ to one counterpart¹⁷ (excluding qualifying residential mortgage loans) cannot exceed 0.2% of the overall regulatory retail portfolio;
- iv. low value of individual exposures - the aggregate exposure¹⁸ to one counterparty (excluding qualifying residential mortgage loans) cannot exceed RM5 million equivalent in foreign currency; and
- v. for Islamic banking assets, in addition to the above four criteria, regulatory retail exposures must be based on either Murābahah or Ijārah contracts¹⁹.

2.29 Where an exposure does not fulfill the criteria above, the exposure shall be treated as exposures to corporates.

Loans Secured by Residential Properties

2.30 Loans fully secured by mortgages on residential property²⁰, which are or will be occupied by the borrower, or is rented, shall be carved-out from the regulatory retail portfolio and defined as qualifying residential mortgage loans, if the following criteria are met:

¹⁵ At minimum, Labuan banks must undertake a one-off computation on a monthly basis to fulfil this requirement. The computation requires Labuan banks to aggregate all retail exposures which have fulfilled all other operational requirements for regulatory retail portfolio and ascertain whether all these exposures do not exceed the granularity threshold of 0.2%. If there are exposures which exceed this threshold, they would not be eligible for the 75% risk weight and shall be treated as a corporate exposure. However, Labuan banks may wish to consider undertaking an iterative computation on an annual basis.

¹⁶ Aggregate exposure means gross amount (excluding defaulted exposures and without taking into account credit risk mitigation effects) of all forms of debt exposures (including off-balance sheet exposures) that individually satisfy the other three criteria.

¹⁷ "One counterpart" shall be defined as per the "Guidelines on Single Counterparty Exposure Limit".

¹⁸ Aggregate exposure means gross amount (inclusive of defaulted exposures but without taking into account credit risk mitigation effects) of all forms of debt exposures (including off-balance sheet exposures) that individually satisfy the other three criteria.

¹⁹ Use of the risk weight under the regulatory retail portfolio for exposures based on other Islamic contracts may be allowed, provided that the credit risk profile of such exposures is similar to Murābahah or Ijārah contract.

²⁰ Residential property means property which is zoned for single-family homes, multi-family apartments, townhouses and condominiums. It excludes shop houses which can be eligible for the regulatory retail portfolio as per paragraph 2.28.

- i. the borrower is an individual person;
- ii. the loan is secured by the first legal charge, assignment or strata title on the property;
- iii. the bank has in place a sound valuation methodology to appraise and monitor the valuation of the property;
- iv. the re-computation²¹ of the loan-to-value (LTV) ratio must be undertaken at least on an annual basis;
- v. upon default, the property must be valued by a qualified independent valuer. (Defaulted qualifying residential mortgage loans would be treated differently from other defaulted loans. The treatment is specified under paragraph 2.38);
- vi. the property has been completed and a certificate of fitness has been issued by the relevant authority ; and
- vii. for Islamic banking assets, the exposures must be based on either Murābahah or Ijārah contract²².

²¹ The computation of LTV ratio for regulatory capital purpose shall be subject to the following:

- Labuan banks ensure that the loan amount is reflective of the bank's potential or outstanding exposure to the borrower. Where the bank for instance, has offered to extend the lending facility to cover additional costs to be incurred by the borrower in connection to the housing loan (e.g. for fire insurance, stamp duty fees, legal fees, Mortgage Reducing Term Assurance, etc.), these amounts should also be included in the loan amount.
- At origination, the value of the house will be based on the value stated on the Sales and Purchase Agreement. Subsequently, to qualify for concessionary risk weight, Labuan banks have to demonstrate ability to comply with the valuation rules and annual recomputation of the loan-to-value ratio. Labuan banks should have in place internal policies and procedures to verify the robustness of the property values used in the LTV computation, including where appropriate, requirements for independent valuations to be carried out to confirm the veracity of values stipulated in the Sales and Purchase Agreement. In computing the LTV ratio, Labuan banks are not expected to conduct a formal valuation on each property annually. Labuan banks may use credible secondary information such as property market reports or house indices.

²² The risk weights of qualifying residential mortgages may be applicable to exposures based on other contracts (including Mushārah Mutanaqisah contracts undertaken with and without Waad), provided that the credit risk profile of such exposures is similar to Murābahah or Ijārah contracts. Nevertheless, Labuan FSA expects Labuan bank to monitor the risk characteristics of such contracts in comparison against other similar types of exposures, particularly in relation to the recovery profile.

- 2.31 Qualifying residential mortgage loans shall be risk-weighted²³ based on the following table:

Loan-to-value Ratio ²⁴	<80%	80%-90%
Risk weight	35%	50%

- 2.32 Residential mortgages with a loan-to-value ratio of more than 90% approved and disbursed by Labuan banks, shall be risk-weighted at 100%. Residential mortgages which do not meet the above criteria will be treated as regulatory retail portfolio as per paragraph 2.28.
- 2.33 For residential mortgages which are combined with overdraft facilities, the overdraft facility shall be classified under the residential mortgage if the overdraft facility is secured with the first legal charge. Otherwise, the overdraft facility shall be classified under regulatory retail portfolio.
- 2.34 A summary of the risk weights for all residential mortgage exposures is provided in **Appendix IV**.

Defaulted Exposures

- 2.35 This part specifies the treatment for exposures classified as being in default. The definition of defaulted exposures is attached in **Appendix V**.
- 2.36 The risk weights for the unsecured portion of defaulted exposures (other than defaulted qualifying residential mortgage loans (refer to paragraph 2.38) and higher risk assets (refer paragraph 2.40), net of specific provisions²⁵ (including partial write-offs) are as follows:

²³ Where the residential mortgage loan is protected by Cagamas HKMC Berhad, a risk weight of 20% shall apply on the protected portion while the remaining portion shall be risk-weighted based on the post protection loan-to-value ratios.

²⁴ The loan-to-value ratios are post-protection where applicable.

²⁵ Specific provisions include individual impairment provisions, as well as collective impairment provisions (and regulatory reserves, if any) that are attributable to loans classified as impaired. Individual and collective impairment provisions are as defined under Directive on Financial Reporting Standards for Labuan Licensed Entities.

- i. 150% risk weight when specific provisions are less than 20% of the outstanding amount of the exposure;
 - ii. 100% risk weight when specific provisions are no less than 20% of the outstanding amount of the exposure; and
 - iii. 50% risk weight when specific provisions are no less than 50% of the outstanding amount of the exposure.
- 2.37 For defaulted exposures, similar eligible collateral and guarantees as non-defaulted exposures will be allowed for the purposes of determining the secured portion of defaulted exposures.
- 2.38 Qualifying residential mortgage loans that are in default shall be risk-weighted, net of specific provisions (including partial write-offs) as follows:
- i. 100% when specific provisions are less than 20% of the outstanding amount of the exposure; and
 - ii. 50% when specific provisions are 20% or more of the outstanding amount of the exposure.
- 2.39 An illustration on the computation of the risk-weighted assets for defaulted exposures is provided in **Appendix VI**.

Higher Risk Assets

- 2.40 The following exposures have been identified as high risk assets and are accorded specific risk weights as follows:
- i. non-publicly traded equity investments (includes investments structured based on Mushārah or Mudārah contracts) will be risk-weighted at 150%;
 - ii. residential mortgage loans for abandoned²⁶ housing development project or construction will be risk-weighted at 150%; and

²⁶ For this purpose, abandoned housing project or construction is defined as follows: (i) A housing development project in which construction has continuously stopped for 6 months or more within or

- iii. venture capital investments will be risk-weighted at 150%²⁷.

2.41 In addition, the treatment for defaulted and non-defaulted exposures of these higher risk assets shall be the same.

Other Assets

2.42 Following are specific treatment for other assets not specified above:

- i. Cash and gold²⁸ will be risk-weighted at 0%;
- ii. Investments in the ABF Malaysia Bond Index Fund shall be risk-weighted at 0%;
- iii. Exposures to International Settlements, the International Monetary Fund, the European Central Bank and the European Community shall be accorded a 0% risk weight;
- iv. Exposures to Malaysian stock exchanges²⁹ and clearing houses shall be accorded a 20% risk weight;
- v. Investments in unit trust funds and property trusts funds³⁰ shall be risk-weighted at 100%;
- vi. Publicly traded equity investments held in the banking book shall be risk-weighted at 100%. In addition, equity investments called for by the Federal Government of Malaysia, BNM or other central government of a sovereign country³¹ shall also receive a risk weight of 100%;
- vii. Investment in equity of non-financial commercial subsidiaries will be accorded a 1250% risk weight; and

outside the completion period as per the Sales and Purchase Agreement (ii) The developer has no ability to proceed and complete the project due to financial insolvency (iii) the Ministry qualifies that the developer is no longer able to continue its responsibility as the developer.

²⁷ Labuan FSA may decide to impose more stringent capital treatment including capital deduction.

²⁸ Refers to holding of gold bullion held in own vaults or on an allocated basis to the extent backed by bullion liabilities.

²⁹ Refers to Bursa Malaysia Securities Berhad, Labuan Financial Exchange and other recognised international exchanges.

³⁰ Includes Real Estate Investment Trusts.

³¹ Central bank (including any entity which performs the role of a central bank) or a central government of a sovereign country that is rated at least "A-" (or its equivalent) by an internationally recognised ECAs.

- viii. Investment in sukuk issued by the International Islamic Liquidity Management Corporation (IILM) will be risk-weighted in accordance with paragraph 2.24.

2.43 Any other assets not specified shall receive a standard risk weight of 100%.

B.2.3 TREATMENT FOR THE COMPUTATION OF CREDIT RISK-WEIGHTED ASSETS FOR ISLAMIC CONTRACTS

2.44 This part sets out the specific treatment for the computation of credit risk-weighted assets for seven classes of Islamic contracts undertaken by Labuan banks. Some Islamic banking products may carry different titles and are structured with a certain degree of variations in terms of the contracts. As such, for the purpose of computing the risk-weighted asset amount, Labuan banks are advised to focus on the risk structure and exposure of the products rather than the title and form.

MURĀ BA HA H

Murābahah

- 2.45 A Murābahah contract refers to an agreement whereby a Labuan bank sells to an obligor an asset that it has acquired at an agreed selling price between both parties. The agreed selling price is based on the acquisition cost (purchase price plus other direct costs) of the asset incurred by the Labuan bank and a profit margin agreed between the Labuan bank and its obligor. The Murābahah contract shall include the agreed repayment terms where the obligor is obliged to pay the selling price after taking delivery of the asset.
- 2.46 Labuan banks are exposed to credit risk in the event that the obligor fails to pay the agreed selling price in accordance with the agreed repayment terms under the Murābahah contract. Hence, Labuan banks shall be subject to the capital charge for credit risk exposure once the asset is sold and payment is due to the Labuan bank.

Murābahah for Purchase Orderer (MPO)

- 2.47 A Murābahah for Purchase Orderer (MPO) contract refers to an agreement whereby a Labuan bank sells to an obligor at an agreed selling price, a specified type of asset that has been acquired by the Labuan bank based on an agreement to purchase (AP) by the obligor which can be binding or non-binding. The relevant legal recourse provided under the AP that requires the obligor to perform their obligation to purchase the underlying asset from the Labuan bank shall be a key determinant for the AP to be recognised as binding or non-binding. Thus, it is pertinent for Labuan banks to ensure the adequacy and enforceability of the legal documentation under the MPO contract. The MPO contract shall include the agreed repayment terms where the obligor is obliged to pay the selling price after taking delivery of the asset.
- 2.48 The difference between a Murābahah transaction and an MPO transaction is that under a Murābahah contract, the Labuan bank sells an asset which is already in its possession, whilst in an MPO, the Labuan bank acquires an asset in anticipation that the asset will be purchased by the obligor.
- 2.49 Labuan banks are exposed to credit risk in the event that the obligor fails to pay the agreed selling price in accordance with the agreed repayment terms under the MPO contracts. Hence, Labuan banks shall be subject to the capital charge for credit risk exposure once the asset is sold and payment is due to the Labuan bank.
- 2.49(i) For MPO with binding AP, Labuan banks are exposed to credit risk in the event that the obligor (purchase orderer) defaults on its binding obligation to purchase the assets under the contract. In view of the adequate legal recourse that requires the obligor to purchase the asset at an agreed price, the credit risk exposure commences once the Labuan bank acquires the underlying asset. For non-binding MPO, the effect is similar to a Murābahah transaction.

2.49(ii) The following table summarises the treatment for the determination of risk weights of *Murābahah* and *MPO* contracts:

Contract	Applicable Stage of the Contract (When Labuan banks start providing for capital)	Determination of Risk Weight
Murābahah and MPO with non-binding AP	When sale of asset is completed and payment is due from the customer Note: Exposure is based on outstanding amount.	Based on type of exposure as per Part B.2.2 Definition of Exposures.
MPO with binding AP	When asset is acquired by Labuan bank and available for sale (asset on balance sheet) ³² Note: Exposure is equivalent to the asset acquisition cost.	

BAI' BITHAMAN AJIL (BBA) AND BAI' INAH

2.50 For the purpose of the Guidelines, the Bai` Bithaman Ajil (BBA) and Bai`Inah contracts are deemed to have similar transaction characteristics and financing effect as the Murābahah and MPO contract. The BBA involves the selling of an asset with deferred payment terms while Bai' Inah involves a sell and buy back agreement. An example of Bai' Inah is where an obligor sells to the Labuan bank an asset at a selling price that will be repaid on cash basis for the first leg of the agreement. On the second leg, the Labuan bank sells back the asset to the obligor on deferred payment terms to enable the financing transaction.

SALAM

2.51 A Salam contract refers to an agreement whereby a Labuan bank purchases from an obligor a specified type of commodity, at a predetermined price, which is to be delivered on a specified future date in a specified quantity and quality. Labuan bank as the purchaser of the commodity makes full payment of the purchase price

³² Includes assets which are in possession due to cancellation of AP by customers.

upon execution of the Salam contract. Labuan banks are exposed to credit risk in the event that the obligor (commodity seller) fails to deliver³³ the paid commodity as per the agreed terms.

2.52 In addition, a Labuan bank may also enter into a parallel Salam contract, which is a back-to-back contract to sell the commodity purchased under the initial Salam contract to another counterparty. This arrangement enables the Labuan bank to mitigate the risk of holding the commodity.

2.53 Islamic banks undertaking the parallel Salam transaction are exposed to credit risk in the event that the purchaser fails to pay for the commodity it had agreed to purchase from the Islamic bank. Nevertheless, in the event of non-delivery of the commodity by the seller under the initial Salam contract, the Islamic bank is not discharged of its obligation to deliver the commodity to the purchaser under the parallel Salam contract.

2.53(i) For the purpose of computing the credit risk-weighted asset, the purchase price paid by Labuan bank to the seller of commodity in a Salam contract shall be assigned a risk weight based on the seller's external rating.

2.53(ii) The following table summarises the treatment for the determination of credit risk weights of *Salam* contracts:

Contract	Applicable Stage of the Contract (When Labuan banks start providing capital)	Determination of Risk Weight
<i>Salam</i>	Labuan bank is expecting delivery of the commodity after purchase price has been paid to seller Note: Exposure amount is equivalent to the payment made by Labuan bank	Based on type of exposure as per Part B.2.2 Definition of Exposures.

³³ Delivery risk in a Salam contract is measured based on the commodity seller's credit risk.

Contract	Applicable Stage of the Contract (When Labuan banks start providing capital)	Determination of Risk Weight
<i>Salam with Parallel Salam</i>	Similar to the above (The Parallel Salam does not extinguish requirement for capital from the first Salam contract)	Based on type of exposure as per Part B.2.2 Definition of Exposures.

ISTISNĀ`

- 2.54 An Istisnā` contract refers to an agreement to sell to or buy from an obligor an asset which has yet to be manufactured or constructed. The completed asset shall be delivered according to the buyer's specifications on a specified future date and at an agreed selling price as per the agreed terms.
- 2.55 As a seller under the Istisnā` contract, the Labuan bank is exposed to credit risk in the event that the obligor fails to pay the agreed selling price, either during the manufacturing or construction stage, or upon full completion of the asset.
- 2.56 As a seller, the Labuan bank has the option to manufacture or construct the asset on its own or to enter into a parallel Istisnā` contract to procure the asset from another party or, to engage the services of another party to manufacture or construct the asset. Under the parallel Istisnā` contract, as the purchaser of the asset, the Labuan bank is exposed to credit risk in the event that the seller fails to deliver the specified asset at the agreed time and in accordance with the initial Istisnā` ultimate buyer's specifications. The failure of delivery of completed asset by the parallel Istisnā` seller does not discharge the Labuan bank from its obligations to deliver the asset ordered by the obligor under the initial Istisnā` contract. Thus, the Labuan bank is additionally exposed to the potential loss of making good the shortcomings or acquiring the specified assets elsewhere.

2.57 The following table specifies the treatment for the determination of risk weights of Istisnā` contracts:

Contract	Applicable Stage of the Contract (When Labuan banks start providing capital)	Determination of Risk Weight
Istisnā` and Parallel Istisnā`	Unbilled and unpaid billed work-in-progress	Based on type of exposure as per Part B.2.2 Definition of Exposures ; or Supervisory slotting criteria method subject to fulfilling minimum requirements as per Appendix VII .

IJĀRAH

Ijārah

2.58 Ijārah contracts refer to a lease agreement whereby the lessor transfers the right to use (or usufruct) of the leased asset to the lessee, for an agreed period and at an agreed consideration, in the form of lease rental. The lessor maintains ownership of the leased asset during the lease period under these contracts.

2.59 As the owner of the leased asset, Labuan banks therefore assume all liabilities and risks pertaining to the leased asset including the obligation to restore any impairment and damage to the leased asset arising from wear and tear, as well as natural causes which are not due to the lessee's misconduct or negligence.

2.60 As a lessor, Labuan banks may acquire the asset to be leased based on the lessee's specifications as stipulated under the agreement to lease (AL), prior to entering into the Ijārah contract with the lessee. The AL can be binding or non-binding on the lessee depending on the legal recourse in the AL, which states the obligation for the lessee to lease the specified asset from the lessor.

- 2.61 Labuan banks as the lessor under the Ijārah contracts are exposed to the credit risk of the lessee in the event that the lessee fails to pay the rental amount as per the agreed terms.
- 2.62 In addition, under a binding AL, Labuan banks are exposed to credit risk in the event that the lessee (lease orderer) defaulting on its binding obligation to execute the Ijārah contract. In this situation, the Labuan bank may lease or dispose off the asset to another party. However, the Labuan bank is also exposed to the credit risk of the lessee if the lessee is not able to compensate for the losses incurred arising from the disposal of the asset.
- 2.63 Under a non-binding AL, the Labuan bank is not exposed to the risk of non-performance by the lease orderer given that the Labuan bank does not have legal recourse to the lease orderer. In this regard, credit risk exposure arises upon the commencement of rental agreement.

Ijārah Muntahia Bittamleek

- 2.64 Ijārah Muntahia Bittamleek (IMB) contract refers to a lease agreement similar to Ijārah contracts. However, in addition to paragraphs 2.51 to 2.56, the lessor has an option to transfer ownership of the leased asset to the lessee in the form of a gift or a sale transaction at the end of IMB.

Al-Ijārah Thumma Al-Ba i`

- 2.65 Al-Ijārah Thumma Al-Ba i` (AITAB) contract is a type of IMB contract that ends with a transfer of ownership to the lessee by way of a sale transaction and shall be treated similarly to the IMB contract for purposes of capital adequacy requirements. In line with the applicable accounting treatment, where Islamic financial products apply the AITAB contract for the purpose of creating financing facilities, the outstanding rental amount refers to the total outstanding principal amount plus accrued profit due from obligor.

2.65(i) The following table summarises the treatment for the determination of risk weights of Ijārah/IMB contracts for the lessee:

Type of AL	Applicable Stage of the Contract (When Labuan banks start providing capital)		Determination of Risk Weight
	Upon signing an AL and asset is in balance sheet available for lease	Upon signing an LC and the lease rental payments are due from the lessee	
Binding	Exposure to credit risk Note: Exposure is equivalent to asset acquisition cost	Exposure to credit risk Note: Exposure is based on outstanding rental amount	Risk weight is based on customer's (prospective lessee's) external rating
Non-binding/ Without AL	No credit risk	Exposure to credit risk Note: Exposure is based on outstanding rental amount	Risk weight is based on lessee's external rating

MUSHĀRAKAH

2.66 A Mushārah contract is an agreement between a Labuan bank and its obligor to contribute an agreed proportion of capital funds to an enterprise or to acquire ownership of an asset/real estate. The proportion of the capital investment may be on a permanent basis or, on a diminishing basis where the obligor progressively buys out the share of the Labuan bank (thus, this contract is named Diminishing Mushārah, which is categorised under Mushārah contract for the purpose of this framework). Profits generated by the enterprise or an asset/real estate are shared in accordance to the terms of the Mushārah agreement, while losses are shared based on the capital contribution proportion.

2.67 In general, Mushārah contracts can broadly be classified into two categories as follows:

- i. Equity participation in a private commercial enterprise to undertake business ventures or financing of specific projects; and
- ii. Joint ownership in an asset or real estate.

I. EQUITY PARTICIPATION IN A PRIVATE COMMERCIAL ENTERPRISE TO UNDERTAKE BUSINESS VENTURES OR FINANCING OF SPECIFIC PROJECTS

2.68 A Labuan bank may enter into a Mushārah contract with their obligor to provide an agreed amount of capital for the purpose of participating in the equity ownership of an enterprise. In this arrangement, the Labuan bank is exposed to capital impairment risk in the event that the business activities undertaken by the enterprise incur losses. The Mushārah agreement may provide an agreed 'exit mechanism' which allows partners to divest their interest in the enterprise at a specified tenor or at the completion of the specified project. In this regard, the Labuan bank must ensure that the contract clearly stipulates the exit mechanism for partners to redeem their investment in this entity.

2.68(i) Labuan banks that enter into this type of Mushārah contract are exposed to the risk similar to an equity holder or a joint venture arrangement where the losses arising from the business venture are to be borne by the partners. As an equity investor, the Labuan bank serves as the first loss absorber and its rights and entitlements are subordinated to the claims of creditors. In terms of risk measurement, the risk exposure to an enterprise may be assessed based on the performance of the specific business activities undertaken by the joint venture as stipulated under the agreement.

II. JOINT OWNERSHIP IN AN ASSET OR REAL ESTATE

2.69 Mushārah contracts that are undertaken for the purpose of joint ownership in an asset or real estate may generally be classified into the two categories as follows:

i) Mushārah contract with an Ijārah sub-contract

- (a) Partners that jointly own an asset or real estate may undertake to lease the asset to third parties or to one of the partners under an Ijārah contract and therefore generate rental income to the partnership. In this case, the risk profile of the Mushārah arrangement is essentially determined by the underlying Ijārah contract. Labuan banks are exposed to credit risk in the event that the lessee fails to service the lease rentals.

ii) Mushārah contract with a Murābahah sub-contract

- (a) As a joint owner of the underlying asset, Labuan banks are entitled to a share of the revenue generated from the sale of asset to a third party under a Murābahah contract. Labuan banks are exposed to credit risk in the event the buyer or counterparty fails to pay for the asset sold under the Murābahah contract.

iii) Diminishing Mushārah

- (a) A Labuan bank may enter into a Diminishing Mushārah contract with an obligor for the purpose of providing financing based on a joint ownership of an asset, with the final objective of transferring the ownership of the asset to the obligor in the contract.
- (b) The contract allows the obligor to gradually purchase the Labuan bank's share of ownership in an asset/real estate or equity in an enterprise over the life of the contract under an agreed repayment terms and conditions which reflect the purchase consideration payable by the obligor to acquire the Labuan bank's share of ownership.
- (c) As part of the mechanism to allow the obligor to acquire the Labuan

bank's share of ownership, the Labuan bank and obligor may agree to lease the asset/real estate to the obligor. The agreed amount of rental payable can be structured to reflect the progressive acquisition of the Labuan bank's share of ownership by the obligor. Eventually, the full ownership of the asset will be transferred to the obligor as it continues to service the rental payment. In this regard, the Labuan bank is exposed to credit risk similar to an exposure under the Mushārah with Ijārah contract.

- (d) However, if the exposure under the Diminishing Mushārah contract consists of share equity in an enterprise, the Labuan bank shall measure its risk exposure using the treatment for equity risk.

2.69(i) The following table specifies the treatment for the determination of credit risk weights of Mushārah contracts:

Contract	Applicable Stage of the Contract (When Labuan banks start providing capital)	Determination of Risk Weight
Mushārah for equity holding in banking book	Holding of equity	100% risk weight for publicly traded equity and 150% risk weight for non-publicly traded equity; or Supervisory slotting criteria method subject to fulfilling minimum requirements as per Appendix VII .
Mushārah for project financing	Funds advanced to joint venture	150% risk weight ³⁴ ; or Supervisory slotting criteria method subject to fulfilling minimum requirements as per Appendix VII .
Mushārah with sub- contract	Exposure to credit risk	As set out under the subcontract.

³⁴ Labuan FSA reserves the right to increase the risk weight if the risk profile of the exposure is deemed higher.

MUDĀRABAH

2.70 A Mudārabah contract is an agreement between a Labuan bank and an obligor whereby the Labuan bank contributes a specified amount of capital funds to an enterprise or business activity that is to be managed by the obligor as the entrepreneur (Mudārib). As the capital provider, the Labuan bank is at risk of losing its capital investment (capital impairment risk) disbursed to the Mudārib. Profits generated by the enterprise or business activity are shared in accordance with the terms of the Mudārabah agreement whilst losses are borne solely by the Labuan bank (capital provider)³⁵. However, losses due to misconduct, negligence or breach of contracted terms³⁶ by the entrepreneur, shall be borne solely by the Mudārib. In this regard, the amount of capital invested by the Labuan bank under the Mudārabah contract shall be treated similar to an equity exposure.

2.71 Mudārabah transactions can be carried out:

- i. on a restricted basis, where the capital provider authorises the Mudārib to make investments based on a specified criteria or restrictions such as types of instrument, sector or country exposures; or
- ii. on an unrestricted basis, where the capital provider authorises the Mudārib to exercise its discretion in business matters to invest funds and undertake business activities based on the latter's skills and expertise.

2.72 In addition, transactions involving Mudārabah contracts may generally be subdivided into two categories as follows:

I. EQUITY PARTICIPATION IN AN ENTITY TO UNDERTAKE BUSINESS VENTURES

2.73 This type of Mudārabah contract exposes the Labuan bank to risks akin to an equity investment, which is similar to the risk assumed by an equity holder in a

³⁵ Losses borne by the capital provider would be limited to the amount of capital invested.

³⁶ Labuan banks are encouraged to establish and adopt stringent criteria for definition of misconduct, negligence or breach of contracted terms.

venture capital or a joint-venture investment. As an equity investor, the Labuan bank assumes the first loss position and its rights and entitlements are subordinated to the claims of creditors.

II. INVESTMENT IN PROJECT FINANCE

2.74 The Labuan bank's investment in the Mudārabah contract with a Mudārib is for the purpose of providing bridging finance to a specific project. This type of contract exposes the Labuan bank to capital impairment risk in the event that the project suffers losses. Under this arrangement, the Labuan bank as an investor provides the funds to the construction company or Mudārib that manages the construction project and is entitled to share the profit of the project in accordance to the agreed terms of the contract and must bear the full losses (if any) arising from the project.

2.75 There may be situations where the risk profile of money market instruments based on Mudārabah contracts may not be similar to an equity exposure given the market structure and regulatory infrastructure governing the conduct of the market. In particular, Mudārabah interbank investments in the domestic Islamic money market would attract the credit risk of the Labuan bank instead of equity risk despite having similarities in the contractual structure.

2.75(i) The following table summarises the treatment for the determination of risk weights for Mudārabah contracts:

Contract	Applicable Stage of the Contract (When Labuan banks start providing capital)	Determination of Risk Weight
Mudārabah for equity holding in banking book	Holding of equity	100% risk weight for publicly traded equity and 150% risk weight for non- publicly traded equity; or Supervisory slotting criteria method subject to fulfilling minimum requirements as per Appendix VII .

Contract	Applicable Stage of the Contract (When Labuan banks start providing capital)	Determination of Risk Weight
Mudārabah for project financing	Amount receivable from Mudārib in respect of progress payments due from ultimate customers	If a binding agreement exists for ultimate customers to pay directly to Labuan bank: Based on external rating of ultimate customer (Type of customer as per Part B.2.2 Definition of Exposures)
	Remaining balance of funds advanced to the Mudārib.	150% risk weight ³⁷ ; or Supervisory slotting criteria method subject to fulfilling minimum requirements as per Appendix VII .

SUKŪK

2.76 SukUk contracts are 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 assets.

2.77 SukUk contracts can be broadly categorised into:

- i. asset-based sukUk, such as in the case of Salam, Istisnā` and Ijārah; and
- ii. equity-based sukUk, such as in the case of Mushārah or Mudārabah.

2.78 This part sets out the treatment for SukUk held in the banking book. The treatment for Sukūk held in trading book is addressed in the market risk component of this framework.

2.79 The risk weight for sukUk that are rated by a recognised ECAI is determined based on the ECAI's external credit assessment as per Part B.2.2 Definition of

³⁷ Labuan FSA reserves the right to increase the risk weight if the risk profile of the exposure is deemed higher.

Exposures. In the case of unrated sukUk, the risk weight is determined based on the underlying contract of the sukUk.

QARDH

2.79(i) Qardh is a loan given by a Labuan bank for a fixed period, where the borrower is contractually obliged to repay only the principal amount borrowed. In this contract, the borrower is not obligated to pay an extra amount (in addition to the principal amount borrowed) at his absolute discretion as a token of appreciation to the Labuan bank.

2.79(ii) Labuan banks are exposed to credit risk in the event that the borrower fails to repay the principal loan amount in accordance to the agreed repayment terms. Hence, the credit risk exposure commences upon the execution of the Qardh contract between the Labuan bank and the borrower.

2.79(iii) The risk weight for Qardh is determined based on the type of exposure as per Part B.2.2 Definition of Exposures.

B.2.4 OFF-BALANCE SHEET ITEMS

2.80 Off-balance sheet items shall be treated similarly to the Basel 1 framework, where the credit risk inherent in each off-balance sheet instrument is translated into an on-balance sheet exposure equivalent (credit equivalent) by multiplying the nominal principal amount with a credit conversion factor (CCF); and the resulting amount then being weighted according to the risk weight of the counterparty.

2.81 In addition, counterparty risk weights for over-the-counter (OTC) derivative transactions will be determined based on the external rating of the counterparty and will not be subject to any specific ceiling.

2.82 The CCFs for the various types of off-balance sheet instruments are as follows:

	Instrument	CCF
a.	Direct credit substitutes, such as general guarantees of indebtedness including standby letters of credit serving as financial guarantees for loans and securities), acceptances (including endorsements with the character of acceptances) and credit derivatives (if the Labuan bank is the protection seller).	100%
b.	Certain transaction-related contingent items, such as performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions.	50%
c.	Short-term self-liquidating trade-related contingencies, such as documentary credits collateralised by the underlying shipments. The credit conversion factor shall be applied to both the issuing and confirming bank.	20%
d.	Assets ³⁸ sold with recourse, where the credit risk remains with the selling institution.	100%
e.	Forward asset purchases, and partly-paid shares and securities, which represent commitments with certain drawdown.	100%
f.	Obligations under an on-going underwriting agreement (including underwriting of shares/ securities issue) and revolving underwriting facilities.	50%
g.	Lending of banks' securities or the posting of securities as collateral by banks, including instances where these arise out of repo-style transactions. (i.e. repurchase / reverse repurchase and securities lending / borrowing transactions.	100%
h.	Derivatives contracts.	Credit equivalent to be derived using current exposure method ³⁹

³⁸ Item (d), which includes housing loans sold to Cagamas Bhd, and (e), should be risk-weighted according to the type of asset (housing loan) and not according to the counterparty (i.e. Cagamas) with whom the transaction has been entered into.

³⁹ The credit equivalent exposure is based on the sum of the positive mark-to-market replacement cost of the contract and the potential future exposure.

	Instrument	CCF
i.	Other commitments, such as formal standby facilities and credit lines, with an original maturity of over one year.	50%
j.	Other commitments, such as formal standby facilities and credit lines, with an original maturity of up to one year.	20%
k.	Any commitments that are unconditionally cancelled at any time by the bank without prior notice or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness.	0% Refer to paragraph 2.82(i)

2.82(i) Any commitments that are unconditionally and immediately cancellable and revocable by the Labuan bank or that effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness (for example, corporate overdrafts and other facilities), at any time without prior notice, will be subject to 0% CCF. To utilise the 0% CCF, the Labuan bank must demonstrate that legally, it has the ability to cancel these facilities and that its internal control systems and monitoring practices are adequate to support timely cancellations which the Labuan bank does effect in practice upon evidence of a deterioration in a borrower's creditworthiness. Labuan banks should also be able to demonstrate that such cancellations have not exposed the Labuan bank to legal actions, or where such actions have been taken, the courts have decided in favour of the Labuan bank.

2.83 Where there is an undertaking to provide a commitment on an off-balance sheet item⁴⁰, Labuan banks can apply the lower of the two applicable credit conversion factors.

2.84 In addition to the computation under item (h) above, counterparty credit risk may also arise from unsettled securities, commodities, and foreign exchange transactions from the trade date, irrespective of the booking or accounting

⁴⁰ Such as commitments to provide letters of credit or guarantees for trade purposes. For example, if a banking institution provides the customer a committed limit on the amount of letters of credit they can issue over a one-year period, with the customer drawing on this committed limit over time.

transaction. Labuan banks are encouraged to develop, implement and improve systems for tracking and monitoring the credit risk exposures arising from unsettled transactions as appropriate for producing management information that facilitates action on a timely basis. When these transactions are not processed via a delivery-versus-payment system (DvP) or a payment-versus-payment (PvP) mechanism, these transactions are subject to a capital charge as calculated in **Appendix IX**.

- 2.85 Labuan banks must also closely monitor securities, commodities, and foreign exchange transactions that have failed, starting from the first day they fail. The capital treatment for these failed transactions is also calculated based on **Appendix IX**.

B.2.5 CREDIT RISK MITIGATION

- 2.86 This section outlines general requirements for the use of credit risk mitigation and eligibility criteria, detailed methodologies and specific requirements with respect to the following Credit Risk Mitigation (CRM) techniques:
- i. Collateralised transactions;
 - ii. On-balance sheet netting; and
 - iii. Guarantee and credit derivatives.
- 2.87 No additional CRM will be recognised for capital adequacy purposes on exposures where the risk weight is mapped from a rating specific to a debt security where that rating already reflects CRM. For example, if the rating has already taken into account a guarantee pledged by the parent of the borrower, then the guarantee shall not be considered again for credit risk mitigation purposes.
- 2.88 While the use of CRM techniques reduces or transfers credit risk, it may introduce or increase other risks such as legal, operational, liquidity and market risk. Therefore, it is imperative that Labuan banks control these risks by employing robust policies, procedures and processes including strategies to manage these risks, valuation, systems, monitoring and internal controls. Labuan banks must be

able to demonstrate to Labuan FSA that it has adequate risk management policies and procedures in place to control these risks arising from the use of CRM techniques. In any case, Labuan FSA reserves the right to take supervisory action under Pillar 2 should the Labuan bank's risk management in relation to the application of CRM techniques be insufficient. In addition, Labuan banks will also be expected to observe Pillar 3 requirements⁴¹ in order to obtain capital relief in respect of any CRM techniques.

Minimum Conditions for the Recognition of Credit Risk Mitigation Techniques

2.89 In order to obtain capital relief for use of any CRM technique, the following minimum conditions must be fulfilled:

- i. all documentation used in collateralised transactions and for documenting on-balance sheet netting, guarantees and credit derivatives must be binding on all parties and legally enforceable in all relevant jurisdictions;
- ii. sufficient assurance from legal counsel has been obtained with respect to the legal enforceability of the documentation; and
- iii. periodic review is undertaken to confirm the ongoing enforceability of the documentation.

2.90 In addition to the above, for Labuan banks operating with an Islamic banking operations, where the CRM technique is applied on Islamic banking exposures to obtain capital relief, the collateral used in the CRM computation must be fully Sharī'ah-compliant.

2.91 In general, only collateral and/or guarantees that are actually posted and/or provided under a legally enforceable agreement are eligible for CRM purposes. A commitment to provide collateral or a guarantee is not recognised as an eligible CRM technique for capital adequacy purposes until the commitment to do so is actually fulfilled.

⁴¹ The Guidelines on Disclosure Requirements (Pillar III) will be issued by Labuan FSA at a later date under Phase II.

Credit Risk Mitigation Techniques

Collateralised Transactions

- 2.92 A collateralised transaction is one in which:
- Labuan banks have a credit exposure or potential credit exposure; and
 - that credit exposure or potential credit exposure is hedged in whole or in part by collateral posted by a counterparty or by a third party on behalf of the counterparty.
- 2.93 For collateralised transactions, Labuan banks may opt for either the simple approach (paragraphs 2.105 to 2.112), which, similar to the Basel I framework, substitutes the risk weight of the collateral for the risk weight of the counterparty for the collateralised portion of the exposure, or the comprehensive approach (from paragraph 2.113 to 2.130), which allows greater offset of collateral against exposures, by effectively reducing the exposure amount by the value ascribed to the collateral.
- 2.94 The comprehensive approach for the treatment of collateral will also be applied to calculate counterparty risk charges for over-the-counter (OTC) derivatives and repo-style transactions in the trading book.
- 2.95 Labuan banks shall adopt any of the two approaches for exposures in the banking book and this approach must be applied consistently within the banking book. (This rule however, does not apply to Islamic banking approach for recognition of non-physical asset collateral and the comprehensive approach for physical asset collateral concurrently). For the trading book, only the comprehensive approach is allowed. Partial collateralisation is recognised in both approaches. Mismatches in the maturity of the underlying exposure and the collateral will only be allowed under the comprehensive approach.
- 2.96 Labuan banks shall indicate upfront to Labuan FSA which approach it intends to adopt for CRM purposes. Any subsequent migration to a different approach shall also be communicated to Labuan FSA.

Minimum Requirements for Collateralised Transactions

- 2.97 In addition to the general requirements specified under paragraphs 2.89 to 2.91, the legal mechanism by which collateral is pledged or transferred must ensure that the Labuan bank has the right to liquidate or take legal possession of the collateral in a timely manner in the event of default, insolvency or bankruptcy of the counterparty. Furthermore, Labuan banks must take all steps necessary to fulfill those requirements under the law to protect their interest in the collateral.
- 2.98 For collateral to provide effective cover, the credit quality of the counterparty and the value of collateral must not have a material positive correlation. For example, securities issued by the counterparty or a related counterparty⁴² as a form of collateral against a loan would generally be materially correlated, thus providing little cover and therefore would not be recognised as eligible collateral.
- 2.99 Labuan banks must have clear and robust procedures for timely liquidation of collateral to ensure that any legal conditions required for declaring the default of the counterparty and liquidating the collateral are observed and that collateral can be liquidated promptly.
- 2.100 A capital requirement will be applied on either side of a collateralised transaction. For example, both repurchase and reverse repurchase agreements will be subject to capital requirements. Likewise, both sides of securities lending and borrowing transactions will be subject to explicit capital charges, as will the posting of securities in connection with a derivative exposure or other borrowing. However, sale and buyback agreement (SBBA) and reverse SBBA transactions will not be deemed as collateralised transactions given that they involve outright purchase and sale transactions. Please refer to **Appendix XV** for the capital treatment for these transactions.
- 2.101 Where Labuan banks are acting as an agent, arranges a repo-style transaction (i.e. repurchase/reverse repurchase and securities lending/borrowing

⁴² As defined under the Guidelines on Single Counterparty Exposure Limit (SCEL) for Labuan banks.

transactions) between a customer and a third party and provides a guarantee to the customer that the third party will perform its obligations, then the risk to the Labuan bank is the same as if the Labuan bank had entered into the transaction as a principal. In such circumstances, a Labuan bank will be required to allocate capital requirement as if it were itself the principal.

- 2.102 Where collateral is held by a custodian, Labuan banks must take reasonable steps to ensure good custody of that collateral and take reasonable steps to ensure that the custodian segregates the collateral from its own assets.

Eligible Collateral

- 2.103 In the computation of capital adequacy requirements for collateralised transactions, the following collateral instruments are eligible for recognition under the simple and comprehensive approach subject to the minimum conditions specified above being met:

Approach	Collateral Recognised
Simple Approach	<ul style="list-style-type: none"> i. Cash⁴³ (including certificate of deposits or comparable instruments issued by the lending Labuan bank) on deposit⁴⁴ with the bank which is incurring the counterparty exposure⁴⁵ ii. Gold iii. Debt securities/Sukūk rated by ECAs where the risk weight attached to the debt securities is lower than that of the borrower iv. Debt securities/Sukūk unrated by a recognised ECAI but fulfil the following conditions: <ul style="list-style-type: none"> a. Issued by a Labuan bank; b. Listed on recognised exchange; c. Classified as senior debt;

⁴³ Cash pledged includes `urbūn (or earnest money held after a contract is established as collateral to guarantee contract performance) and hamish jiddiyyah (or security deposit held as collateral) in Islamic banking contracts (for example, Ijārah)

⁴⁴ Structured deposits and Specific Investment Account (SIA) would not qualify as eligible financial collateral.

⁴⁵ Cash funded credit linked notes issued by the bank against exposures in the banking book which fulfil the criteria for credit derivatives will be treated as cash collateralised transactions.

Approach	Collateral Recognised
	<ul style="list-style-type: none"> d. All rated issue of the same seniority by the issuing bank that are rated at least BBB- or A-3/P-3 or any equivalent rating; and e. Labuan FSA is sufficiently confident about the market liquidity of the debt security/sukuk. v. Equities (including convertible bonds/sukūk) that are included in the main index (refer to Appendix X) vi. Funds (e.g. collective investment schemes, unit trust funds, mutual funds etc) where <ul style="list-style-type: none"> a. A price for the units is publicly quoted daily, and vii. The unit trust funds/mutual fund is limited to investing in the financial instruments listed in this table. (The use or potential use by a fund of derivative instruments solely to hedge investments listed in this table shall not prevent units in that fund from being an eligible financial collateral.)
Comprehensive Approach	<ul style="list-style-type: none"> i. All of the above, and: ii. Equities (including convertible bonds/sukūk) which are not included in a main index i.e. Composite Index of Bursa Malaysia but which are listed on a recognised exchange (refer to Appendix X) iii. Funds (e.g. collective investment schemes, unit trust funds, mutual funds etc) which include equities that are not included in a main index i.e. Composite Index of Bursa Malaysia but which are listed on a recognised exchange. (refer to Appendix X)

2.104 Under certain Islamic banking transactions such as Murābahah, Salam, Istisna' and Ijārah, underlying physical assets, namely commercial and residential real estate⁴⁶ as well as plant and machinery are recognised as collateral or risk mitigant. These physical assets could be recognised as eligible collateral subject

⁴⁶ Exposures that fulfil the criteria of loans secured by residential properties and hence, are entitled to receive the qualifying residential mortgage risk weight are not allowed to use the underlying residential real estate as a credit risk mitigant. This also applies to exposures which do not meet the criteria for loans secured by residential properties but meet the criteria for exposures classified under the regulatory retail portfolio. In addition, banking institutions do not have the option to classify exposures secured by residential properties or the regulatory retail portfolio as exposures to corporate specifically to enjoy the benefits of credit risk mitigation.

to fulfilling the minimum requirements specified under the comprehensive approach as well as additional criteria specified in **Appendix XI**.

Simple Approach

- 2.105 Under this approach, where an exposure on a counterparty is secured against eligible collateral, the secured portion of the exposure must be weighted according to the risk weight appropriate to the collateral. The unsecured portion of the exposure must be weighted according to the risk weight applicable to the original counterparty.
- 2.106 For collateral used under the simple approach, the collateral must be pledged for at least the entire life of the exposure, it must be marked-to-market and re-valued at a minimum frequency of 6 months. The portion of exposure collateralised by the market value of the recognised collateral will 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 2.108 to 2.110. The remainder of the exposure shall be assigned the original risk weight accorded to the counterparty.
- 2.107 In determining the appropriate risk weight to be assigned on collateral pledged by the counterparty, Labuan banks should refer to risk weight tables specified under **Appendix III**. For collateral denominated in local currency, Labuan banks must use the risk weight linked to domestic currency ratings. Similarly, the risk weight linked to foreign currency ratings should be used if collateral pledged is denominated in foreign currency.

Exceptions to the Risk Weight Floor

- 2.108 Transactions which fulfill the criteria outlined in paragraph 2.123 and are done with a core market participant, as defined in paragraph 2.124, will receive a risk weight of 0%. If the counterparty to the transaction is not a core market participant but fulfill all condition on paragraph 2.127, the transaction should receive a risk weight of 10%.

2.109 A 0% risk weight can also be applied where the exposure and the collateral are denominated in the same currency, and either:

- i. the collateral is cash on deposit as defined in paragraph 2.103; or
- ii. the collateral is in the form of securities eligible for a 0% risk weight, and its market value has been discounted by 20%.

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

Collateralised OTC Derivatives Transactions⁴⁷

2.111 As specified in **Appendix VIII**, the calculation of the counterparty credit risk charge for an individual contract will be as follows:

$$\text{Counterparty Charge} = [(\text{RC} + \text{add-on}) - \text{CA}] \times r \times 8\%$$

Where:

- RC = the replacement cost
- add-on = the amount for potential future exposure calculated according to **Appendix VIII**.
- CA = the volatility adjusted collateral amount under the comprehensive approach
- r = the risk weighted of the counterparty

2.112 When effective bilateral netting contracts are in place, RC will be the net replacement cost and the add-on will be A_{Net} ⁴⁸ as calculated according to **Appendix VIII**. The haircut for currency risk (H_{fx}) should be applied when there is a mismatch between the collateral currency and the settlement currency. Even

⁴⁷ For example, collateralised interest rate swap transactions.

⁴⁸ Add-on for netted transactions.

in the case where there are more than two currencies involved in the exposure, collateral and settlement currency, a single haircut assuming a 10-business day holding period scaled up as necessary depending on the frequency of mark-to-market will be applied.

Comprehensive Approach

- 2.113 Under the comprehensive approach, when taking collateral, Labuan banks must calculate an adjusted exposure amount to a counterparty after risk mitigation, E^* . This is done by applying volatility adjustments to both the collateral and the exposure⁴⁹, taking into account possible future price fluctuations. Unless either side of the transaction is cash, the volatility adjusted amount for the exposure shall be higher than the actual exposure and lower than the collateral.
- 2.114 The adjusted exposure amount after risk mitigation shall be weighted according to the risk weight of the counterparty to obtain the risk-weighted asset amount for the collateralised transaction.
- 2.115 When the exposure and collateral are held in different currencies, an additional downward adjustment must be made to the volatility adjusted collateral to take account of possible future fluctuations in exchange rates.

Calculation of Capital Requirement

- 2.116 Under the comprehensive approach, the adjusted exposure amount after risk mitigation for collateralised transactions 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 for currency mismatch between the collateral and exposure

⁴⁹ Exposure amounts may vary where, for example, securities are being lent.

Standard Supervisory Haircuts

2.117 For purposes of applying the comprehensive approach for collateralised transactions, the standard supervisory haircuts⁵⁰ (H), expressed as percentage, are as follows:

Issue Rating for Debt Securities/Sukūk	Residual Maturity	Sovereign	Other Issues
AAA to AA-/A-1	≤ 1 year	0.5	1
	> 1 year, ≤ 5 years	2	4
	> 5 years	4	8
A+ to BBB-/A-2 to A-3/P-3 and unrated bank securities/sukūk	≤ 1 year	1	2
	> 1 year, ≤ 5 years	3	6
	> 5 years	6	12
BB+ to BB-	All	15	
Main index equities (including convertible bonds/sukūk) and Gold		15	
Other equities (including convertible bonds/sukūk) listed on a recognised exchange		25	
Funds (e.g. collective investment schemes, unit trust funds, mutual funds)		Highest haircut applicable to any security in which the fund can invest at any one time.	
Cash in the same currency		0	
CRE/RRE/Other physical collaterals (only available as credit risk mitigants for Islamic banking exposures) ⁵¹		30	
Currency mismatch		8	

⁵⁰ Assuming daily mark-to-market, daily re-margining and 10-business day holding period, except for physical assets that are subjected to minimum annual revaluation as per Appendix XI.

⁵¹ While Labuan FSA has provided a minimum 30% haircut on other types of physical collateral, Labuan banks should exercise conservatism in applying haircuts on physical assets' value used as CRM for capital requirement purposes. In this regard, Labuan Banks are expected to use a more stringent haircut should their internal historical data on the disposal of physical assets reveal loss amounts which reflect a haircut of higher than 30%.

2.118 For transactions in which a Labuan bank lends non-eligible instruments (e.g. non-investment grade corporate debt securities/sukūk), the haircut to be applied on the exposure should be the same as that for other equities, i.e. 25%.

Adjustment to standard supervisory haircuts for different holding periods and non-daily mark-to-market or re-margining

2.119 For some transactions, depending on the nature and frequency of revaluation and re-margining provisions, different holding periods are appropriate. In this regard, the framework for collateral haircuts distinguishes between repo-style transactions (repurchase/reverse repurchase agreement and securities lending/borrowing), other capital market transactions (OTC derivatives transaction and margin lending) and secured lending.

2.120 The minimum holding period for the various products is summarised in the following table:

Transaction Type	Minimum Holding Period	Condition
Repo-style transaction	Five business days	Daily re-margining
Other capital market transaction	Ten business days	Daily re-margining
Secured lending	Twenty business days	Daily revaluation

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

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

Where:

- H = Haircut
- H_M = Haircut under the minimum holding period
- T_M = Minimum holding period for the type of transaction
- N_R = Actual number of business days between re-margining for capital market transactions or revaluations for secured transactions

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

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

Where:

- T_N = Holding period used by the Labuan bank for deriving H_N
- H_N = Haircut based on the holding period T_N

2.122 For Labuan banks using the standard supervisory haircuts, the 10-business day haircuts provided in paragraph 2.116 will be the basis and this haircut will be scaled up or down depending on the type of transactions and the frequency of re-margining or revaluation using the formula below:

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

Where:

H	=	Haircut
H ₁₀	=	10-business day standard supervisory haircut for instrument
N _R	=	Actual number of business days between re-margining for capital market transactions or revaluation for secured transactions
T _M	=	Minimum holding period for the type of transaction

Conditions for Zero Haircut

2.123 For repo-style transactions, a Labuan bank may apply a zero haircut instead of the supervisory haircuts specified under the comprehensive approach for CRM purposes where the following conditions are satisfied and the counterparty is a core market participant.

- i. Both the exposure and the collateral are cash or a sovereign security qualifying for a 0% risk weight in the standardised approach;
- ii. Both the exposure and collateral are denominated in the same currency;
- iii. Either the transaction is overnight or both the exposure and the collateral are marked-to-market daily and are subject to daily re- margining;
- iv. Following a counterparty's failure to re-margin, the time that is required between the last mark-to-market before the failure to re-margin and the liquidation of the collateral is considered to be no more than four business days;
- v. The transaction is settled across a settlement system proven for that type of transaction;
- vi. The documentation covering the agreement is standard market documentation for repurchase/reverse repurchase agreements and securities/lending borrowing transactions in the securities concerned;
- vii. The transaction is governed by documentation specifying that if the counterparty fails to satisfy an obligation to deliver cash or securities or to

deliver margin or otherwise defaults, then the transaction is immediately terminable; and

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

2.124 For the purpose of applying the zero haircut, the following entities are considered core market participants:

- i. The Federal Government of Malaysia;
- ii. BNM; and
- iii. Conventional banking and Islamic Labuan banks licensed by BNM and Labuan FSA.

2.125 Where other national supervisors have accorded a similar treatment to core market participants of their jurisdictions, Labuan banks can also apply a similar treatment to these exposures. However, Labuan FSA reserves the right to review the treatment for these transactions if the treatment is deemed to be inappropriate.

Treatment of repo-style transactions covered under master netting agreement

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

- i. provide the non-defaulting party the right to terminate and close-out in a timely manner all transactions under the agreement upon event of default, including in the event of insolvency or bankruptcy of the counterparty;
- ii. provide for the netting of gains and losses in transactions (including the value of any collateral) terminated and closed out under it so that single net amount is owed by one party to the other;

- iii. allow for the prompt liquidation or setoff of collateral upon the event of default; and
- iv. be legally enforceable in each relevant jurisdiction upon the occurrence of an event of default and regardless of the counterparty's insolvency or bankruptcy, together with the rights arising from the provisions required above.

2.127 In addition, all repo-style transactions should be subjected to the Global Master Repurchase Agreement (GMRA) with its relevant annexes that specify all terms of the transaction, duties and obligations between the parties concerned.

2.128 Netting across positions in the banking and trading book will only be recognised when the netted transactions fulfill the following conditions:

- i. all transaction are marked to market daily; and
- ii. the collateral instruments used in the transactions are recognised as eligible financial collateral in the banking book.

2.129 The following formula will be applied to take into account the impact of master netting agreements:

$$E^* = \max\{0, [(\sum E - \sum C) + \sum (E_s \times H_s) + \sum (E_{FX} \times H_{FX})]\}^{52}$$

Where

- E^* = The exposure value after risk mitigation
- E = Current value of the exposure
- C = The value of the collateral received
- E_s = Absolute value of the net position in given security
- H_s = Haircut appropriate to E_s
- E_{FX} = Absolute value of the net position in a currency different from the settlement currency
- H_{FX} = Haircut appropriate for currency mismatch

⁵² The starting point for this formula is the formula in paragraph 2.118 which can also be presented as the following:

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

Use of VaR Models

2.130 As an alternative to the use of standard supervisory haircuts for eligible collateral under the comprehensive approach, Labuan banks also may be allowed to use a VaR models approach to reflect the price volatility of the exposure and collateral for repo-style transactions, taking into account correlation effects between security positions. This approach would apply to repo-style transactions covered by bilateral netting agreements on a counterparty-by-counterparty basis as well as other similar transactions (like prime brokerage), that meet the requirements for repo-style transactions.

On-Balance Sheet Netting

2.131 Labuan banks are allowed to compute credit exposures on a net basis for capital requirements where Labuan banks have legally enforceable netting arrangements for loans and deposits⁵³.

2.132 In addition, Labuan bank can only apply on-balance sheet netting on any exposure if the following conditions have be met:

- i. strong legal basis that the netting or off-setting agreement is enforceable in each relevant jurisdiction regardless of whether the counterparty is in default, insolvent or bankrupt,
- ii. able to determine at any time all assets and liabilities with the same counterparty that are subject to netting agreement,
- iii. monitors and controls roll-off risks⁵⁴, and
- iv. monitors and controls the relevant exposure on a net basis.

2.133 The computation of net exposure to a particular counterparty for capital adequacy computation purposes is similar to that specified for collateralised transactions under paragraph 2.116, where assets (loans) will be treated as exposures and

⁵³ Structured deposits and SIA would not be recognised for on-balance sheet netting.

⁵⁴ Roll-off risks relate to the sudden increases in exposure which can happen when short dated obligations (for example deposits) used to net long dated claims (for example loans) mature.

liabilities (deposits) as collateral. For on- balance sheet netting, the haircut will be zero except where there is a currency mismatch. A 10-business day holding period will apply when daily mark-to-market is conducted and all the requirements contained in paragraphs 2.117, 2.122, and 2.147 to 2.150 will apply.

- 2.134 The net exposure amount will be multiplied by the risk weight of the counterparty to obtain risk-weighted assets for the exposure following the on-balance sheet netting.

Guarantees and Credit Derivatives

- 2.135 For a guarantee or credit derivative to be eligible for CRM, the following conditions must be met:

- i. The guarantee or credit derivative must represent a direct claim on the protection provider and must be explicitly referenced to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and cannot be disputed;
- ii. The credit protection contract must be irrevocable except where the credit protection purchaser has not made the payment due to their protection provider. The protection provider must also not have the right to unilaterally cancel the credit cover or increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure; and
- iii. The contract must not have any clause or provision outside the direct control of the Labuan bank that prevents the protection provider from being obliged to pay in a timely manner in the event that the original counterparty fails to make the payment(s) due.
- iv. Additional operational requirements specific for guarantees and credit derivatives as specified in paragraphs 2.137 and 2.138 respectively must be met.

- 2.136 The substitution approach will be applied in determining capital relief for exposures protected by guarantees or credit derivatives. Where an exposure on

a counterparty is secured by a guarantee from an eligible guarantor, the portion of the exposure that is supported by the guarantee is to be weighted according to the risk weight appropriate to the guarantor (unless the risk weight appropriate to the original counterparty is lower). The unsecured portion of the exposure must be weighted according to the risk weight applicable to the original obligor.

Additional Operational Requirements for Guarantees

2.137 In addition to the requirements on legal certainty of the guarantee specified in paragraphs 2.89 to 2.91, all the following conditions must also be satisfied:

- i. On the default/non-payment of the counterparty, the Labuan bank may in a timely manner pursue the guarantor for any monies outstanding under the documentation governing the transaction. The guarantor may pay at once all monies under such documentation to the Labuan bank, or the guarantor may assume the future payment obligations of the counterparty covered by the guarantee;
- ii. The guarantee undertaking is explicitly documented ; and
- iii. Except as noted in the following sentence, the guarantee covers all types of payments the borrower is expected to make under the documentation governing the transaction, such as notional amount, margin payments etc. Where a guarantee covers payment of principal only, interests and other uncovered payments should be treated as unsecured amounts in line with the treatment for proportionally covered exposures under paragraph 2.143.

Additional Operational Requirement for Credit Derivatives

2.138 For a credit derivative contract to be recognised, the following conditions must be satisfied:

- i. Credit events specified by the contracting parties must at least cover:
 - a. Failure to pay the amounts due under terms of the underlying obligation at the time of such failure;

- b. Bankruptcy, insolvency and inability of the borrower to pay its debts, or its failure or admission in writing of its inability generally to pay its debt as they become due, and analogous events; and
- c. Restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e. charge off, provision or other similar debt to the profit and loss account). However, when restructuring is not specified as a credit event but the other requirements in this paragraph are met, partial recognition of the credit derivatives will be allowed, as follows:
 - I. If the amount of credit derivatives is less than or equal to the amount of underlying obligation, 60% of the amount of the hedge can be recognised as covered.
 - II. If the amount of the credit derivative is larger than that of the underlying obligation, then the amount of eligible hedge is capped at 60% of the amount of the underlying obligation.
- d. The credit derivatives shall not terminate prior to expiration of any grace period required for a default on the underlying obligation to occur as a result of a failure to pay, subject to the provision of paragraph 2.148;
- e. Credit derivatives allowing for cash settlement are recognised for capital purpose insofar as a robust valuation process is in place in order to estimate loss reliably. There must be a clearly specified period for obtaining post-credit-event valuation of the underlying obligation;
- f. If the contract requires the protection purchaser to transfer the underlying obligation to the protection provider at settlement, the terms of the underlying obligation must provide that consent to such transfer should not be unreasonably withheld;
- g. The identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the protection seller. The protection

buyer must have the right/ability to inform the protection provider of the occurrence of a credit event;

- h. A mismatch between the underlying obligation and the obligation used for purposes of determining whether a credit event has occurred is permissible if
 - I. the latter obligation ranks pari passu with or is junior to the underlying obligation, and
 - II. the underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross- default or cross acceleration clauses are in place; and
- i. If the credit derivatives cover obligations that do not include the underlying obligation, a mismatch between the underlying and the reference obligation for the credit derivative (i.e. the obligation used for purposes of determining cash settlement value of the deliverable obligation) is permissible if
 - I. the reference obligation ranks pari passu with or is junior to the underlying obligation, and
 - II. the underlying obligation and reference obligation share the same obligor (i.e. the same legal entity) and legally enforceable cross-default or cross-acceleration clauses are in place.

2.139 For credit derivatives, only credit default swaps and total return swaps that provide credit protection equivalent to guarantees will be eligible for recognition. No recognition is given where Labuan banks buy credit protection through a total return swap and record the net payments received on the swap as net income, but does not record offsetting deterioration in the value of the asset that is protected (either through reductions in fair value or by an addition to reserve).

Range of Eligible Guarantors/Credit Protection Providers

2.140 Credit protection given by the following entities will be recognised:

- i. sovereign entities⁵⁵, PSEs, banks and securities firms with a lower risk weight than the counterparty; and
- ii. other entities rated BBB- or better. This would include credit protection provided by parent, subsidiary and affiliate companies when they have a lower risk weight than the obligor.

Risk Weights

2.141 The protected portion is assigned the risk weight of the protection provider. The uncovered portion of the exposure is assigned the risk weight associated with the borrower.

2.142 Any amount for which the Labuan bank will not be compensated for in the event of loss shall be recognised as first loss positions and risk- weighted at 1250% by the Labuan bank purchasing the credit protection.

Proportional and Tranched Cover

2.143 Where partial coverage exists, or where there is a currency mismatch between the underlying obligation and the credit protection, the exposure must be split into covered and uncovered amount. The treatment is outlined below:

Proportional Cover

- Where the amount guaranteed, or against which credit protection is held, is less than the amount of the exposure, and the secured and unsecured portions are equal in seniority, i.e. the Labuan bank and guarantor share

⁵⁵ This includes the Bank for International Settlement, the International Monetary Fund, the European Central Bank and the European Community, as well as those MDBs referred to in footnote 10.

losses on a pro-rata basis, capital relief will be accorded on a proportional basis with the remainder being treated as unsecured.

Tranched Cover

- Where:
 - i. a Labuan bank transfers a portion of the risk of an exposure in one or more tranches to a protection seller(s) and retains some level of risk of the exposure; and
 - ii. the portion of risk transferred and retained are of different seniority, the Labuan bank may obtain credit protection for either the senior tranche (e.g. second loss portion) or the junior tranche (e.g. first loss portion). In this case, the rules as set out in the securitisation component of this framework will apply.

Currency Mismatches

2.144 Where the credit protection is denominated in a currency different from that in which the exposure is denominated, a haircut, H_{FX} , shall be applied on the exposure protected, as follows

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

where:

- G = Nominal amount of the credit protection
- H_{FX} = Haircut appropriate for currency mismatch between the credit protection and underlying obligation.

2.145 The supervisory haircut will be 8%. The haircut must be scaled up using the square root of time formula, depending on the frequency of revaluation of the credit protection as described in paragraph 2.121.

Sovereign Guarantees and Counter-Guarantees

2.146 As specified in paragraph 2.15, a lower risk weight may be applied to Labuan bank's exposures to sovereign or central bank, where the bank is incorporated and where the exposure is denominated in domestic currency and funded in that currency. This treatment is also extended to portions of exposures guaranteed by the sovereign or central bank, where the guarantee is denominated in the domestic currency and the exposure is funded in that currency. An exposure may be covered by a guarantee that is indirectly counter-guaranteed by a sovereign. Such an exposure may be treated as covered by a sovereign guarantee provided that:

- i. the sovereign counter-guarantee covers all credit risk elements of the exposure;
- ii. both the original guarantee and the counter-guarantee meet all operational requirements for guarantees, except that the counter-guarantee need not be direct and explicit to the original exposure; and
- iii. Labuan FSA 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.

Maturity Mismatches

2.147 For calculating RWA, a maturity mismatch occurs when the residual maturity of a hedge is less than that of the underlying exposure.

i. *Definition of Maturity*

2.148 The maturity of the underlying exposure and the maturity of the hedge should both be defined conservatively. The effective maturity of the underlying should be gauged as the longest possible remaining time before the counterparty is scheduled to fulfil its obligation, taking into account any applicable grace period. For the hedge, embedded options which may reduce the term of the hedge should be taken into account so that the shortest possible effective maturity is

used. Where a call is at the discretion of the protection seller, the maturity will always be at the first call date. If the call is at the discretion of the protection buying bank but the terms of the arrangement at origination of the hedge contain a positive incentive for the bank to call the transaction before contractual maturity, the remaining time to the first call date will be deemed to be the effective maturity. For example, where there is a step-up in cost in conjunction with a call feature or where the effective cost of cover increases over time even if credit quality remains the same or increases, the effective maturity will be the remaining time to the first call.

ii. *Risk weights for Maturity Mismatches*

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

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

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

Where:

- P_a = Value of the credit protection adjusted for maturity mismatch
- P = Credit protection (e.g. collateral amount, guarantee amount) adjusted for any haircuts
- t = Min (T, residual maturity of the credit protection arrangement) expressed in years
- T = Min (5, residual maturity of the exposure) expressed in years

Other Aspects of Credit Risk Mitigation

Treatment of Pools of Credit Risk Mitigation Techniques

- 2.151 When multiple credit risk mitigation techniques are used to cover a single exposure, the exposure should be divided into portions which are covered by each type of credit risk mitigation technique. The risk-weighted assets of each portion must be calculated separately. Where credit protection provided by a single guarantor has different maturities, these must also be divided into separate portions.
- 2.152 In addition, where a single transaction is attached to multiple forms of credit risk mitigants, Labuan banks are able to obtain the largest capital relief possible from the risk mitigants.

First to Default Credit Derivatives

- 2.153 There are cases where a bank obtains protection for a basket of reference names and where the first default among the reference names triggers the credit protection and the credit event also terminates the contract. In this case, Labuan bank may recognise regulatory capital relief for the asset within the basket with the lowest risk-weighted amount, but only if the notional amount is less than or equal to the notional amount of the credit derivative.
- 2.154 The following is an example of the computation based on a basket of three assets:

Asset	Amount	Risk Weight	Risk-weighted Exposure
A	USD 100	100%	USD 100
B	USD 100	100%	USD 100
C	USD 100	50%	USD 50
Total			USD 250

Asset C has the lowest risk-weighted exposure and therefore is protected. Assuming the risk weight of the protection seller is 20%, the risk-weighted exposure after credit risk mitigation is USD100 (for Asset A) + USD100 (for Asset B) + USD20 (for Asset C) (being USD100 X 20%) giving a total of USD220.

- 2.155 With regard to the Labuan bank providing credit protection through such an instrument, if the product has an external credit assessment from an eligible ECAI, the risk weight as specified under the Securitisation Framework⁵⁶ will be applied. If the product is not rated by an eligible external credit assessment institution, the risk weights of the assets included in the basket will be aggregated up to a maximum of 1250% and multiplied by the nominal amount of the protection provided by the credit derivative to obtain the risk-weighted asset amount.

Second to Default Credit Derivatives

- 2.156 In the case where the second to default among the assets within the basket triggers the credit protection, the Labuan bank obtaining credit protection through such a product will only be able to recognise any capital relief if first default protection has also been obtained or when one of the assets within the basket has already defaulted.
- 2.157 For Labuan banks providing credit protection through such a product, the capital treatment is the same as in paragraph 2.153 above with one exception. The exception is that, in aggregating the risk weights, the asset with the lowest risk-weighted amount can be excluded from the calculation.

⁵⁶ Refer to Part F.

Floor for Exposures Collateralised by Physical Assets

2.158 For Labuan banks with Islamic banking operations, the RWA for exposures collateralised by physical assets shall be the higher of:

- i. RWA calculated using the CRM method; or
- ii. 50% risk weight applied on the gross exposure amount (i.e. before any CRM effects).

PART C OPERATIONAL RISK

C.1 INTRODUCTION

- 3.1 Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk, but excludes strategic and reputational risk. Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements. For Labuan bank operating an Islamic banking operations, legal risk includes Sharī'ah-compliance risk⁵⁷.
- 3.2 Labuan FSA only recognise the Basic Indicator Approach (BIA) method for calculating operational risk capital charges.

C.1 .1 SOUND PRACTICES FOR OPERATIONAL RISK MANAGEMENT

- 3.3 Regardless of the approach adopted for the operational risk capital charge computation, Labuan banks shall have in place internal operational risk management framework that commensurate with the nature, complexity and sophistication of their business activities.
- 3.4 Labuan banks shall adopt the principles set out in the Guidelines on Corporate Governance for Labuan Banks and Labuan Insurance, issued by Labuan FSA.
- 3.5 Labuan banks are encouraged to collect operational risk loss data given that the information would enable management to identify potential areas of vulnerability, improve overall risk profile and support decision making. Loss data is also an essential prerequisite to the development and functioning of a credible operational risk measurement system.

⁵⁷ Labuan banks that have different internal definition must be able to explain the impact of the difference to the measurement and management of operational risk.

C.1.2 TOTAL OPERATIONAL RISK CAPITAL CHARGE

- 3.6 A Labuan bank maintaining Islamic banking operation must calculate operational risk capital charge for its conventional and Islamic banking operation separately. The Labuan bank's total operational risk capital charge will be the sum of:

$$K_{\text{Total}}^{58} = K_C + K_i$$

Where

- K_{Total} = Total operational risk capital charge
 K_C = Operational risk capital charge for conventional banking operations
 K_i = Operational risk capital charge for Islamic banking operations

C.2 THE BASIC INDICATOR APPROACH (BIA)

- 3.7 The operational risk capital charge for Labuan banks using BIA is equal to the average of a fixed percentage [denoted (α)] of positive annual gross income⁵⁹ over the previous three years.
- 3.8 The formula for calculating the operational risk capital charge under BIA is:

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

Where

- K_{BIA} = capital charge under BIA
 GI = annual gross income of the Labuan bank, where positive, over the preceding three years⁶⁰ as set out in paragraph 3.11

⁵⁸ For Labuan banks that do not operate an Islamic banking operation, the total operational risk capital charge is equivalent to K_C .

⁵⁹ Gross income figures are categorised into 12 quarters (equivalent to three years). Recent annual gross income is calculated by aggregating the gross income of the last four financial quarters. Similar manner of aggregation for the next two years preceding the most recent year.

⁶⁰ If the annual gross income for any given year is negative or zero, the figure shall not be included for the purposes of calculating the operational risk capital charge.

n = number of the preceding three years where annual gross income is positive

α = 15.0%

3.9 A Labuan bank shall calculate its gross income from its conventional banking operations as the sum of its:

- i. Net interest income, and
- ii. Net non-interest income

gross of:

- iii. any provisions (for example for unpaid interest), and
- iv. any operating expenses, including fees paid to outsourcing service provider⁶¹

but does not include

- v. any realised or unrealised profits/losses from sales or impairment of securities in banking book⁶²,
- vi. any income or expense from extraordinary or irregular items, and
- vii. any income derived from insurance recoveries.

A summary table of the gross income computation is provided in **Appendix XII**.

3.10 A Labuan bank shall calculate its gross income from its Islamic banking operations as the sum of its:

- i. Net income from financing activities,
- ii. Net income from investment activities, and
- iii. Other income⁶³

gross of:

- iv. any provisions (for example for unpaid income, and
- v. any operating expenses, including fees paid to outsourcing service provider

⁶¹ In contrast to fees paid for services that are outsourced, fees received by Labuan banks' that provide outsourcing services shall be included in the definition of gross income.

⁶² Refers to profits/losses from securities classified as "held to maturity" and "available for sale" in accordance with the Financial Reporting Standards 139.

⁶³ Includes income from non-Sharī'ah compliant sources.

but does not include

- vi. any realised or unrealised profits/losses from sales or impairment of securities in banking book,
- vii. any income or expense from extraordinary or irregular items, and
- viii. any income derived from insurance recoveries.

Less:

- ix. Income attributable to investment account holders and other depositors.

A summary table of the gross income computation is provided in **Appendix XII**.

- 3.11 A Labuan bank shall calculate its annual gross income, separately for both conventional and Islamic banking operations, for the most recent year by aggregating the gross income of the last four financial quarters. The calculation of the annual gross income for the two years preceding the most recent year shall be computed in a similar manner.

Example

For Labuan banks calculating operational risk capital charge as at end of April 2008, the annual gross income shall be calculated as follows:

	Year 3	Year 2	Year 1
Gross Income for financial quarter ending	March 08 (Gl _{3a})	March 07 (Gl _{2a})	March 06 (Gl _{1a})
	Dec 07 (Gl _{3b})	Dec 06 (Gl _{2b})	Dec 05 (Gl _{1b})
	Sept 07 (Gl _{3c})	Sept 06 (Gl _{2c})	Sept 05 (Gl _{1c})
	June 07 (Gl _{3d})	June 06 (Gl _{2d})	June 05 (Gl _{1d})
Total	Gl₃ = Gl_{3a} + Gl_{3b} + Gl_{3c} + Gl_{3d}	Gl₂ = Gl_{2a} + Gl_{2b} + Gl_{2c} + Gl_{2d}	Gl₁ = Gl_{1a} + Gl_{1b} + Gl_{1c} + Gl_{1d}

- 3.12 If the annual gross income in any of the given years is negative or zero, this figure is excluded from both the numerator and denominator when calculating the three years average.

Example

Using the above example, the operational risk capital charge as at April 2008 is calculated as follows:

	Year 3	Year 2	Year 1
Gross Income for financial quarter ending	March 08 (+10)	March 07 (+10)	March 06 (+10)
	Dec 07 (+20)	Dec 06 (-30)	Dec 05 (+10)
	Sept 07 (-10)	Sept 06 (-20)	Sept 05 (+10)
	June 07 (+30)	June 06 (+10)	June 05 (+10)
Total	$GI_3 = 10 + 20 - 10 + 30 = 50$	$GI_2 = 10 - 30 - 20 + 10 = (30)$	$GI_1 = 10 + 10 + 10 + 10 = 40$
OR capital charge		$\{\sum[(GI_3 \times \alpha) + (GI_1 \times \alpha)]\} / 2 = 6.75$	

For newly established Labuan banks with less than three years data, the new entity shall use any actual gross income earned to date for purposes of deriving the average gross income, while leaving the gross income for any remaining quarters as zero.

PART D MARKET RISK

D.1 INTRODUCTION

- 4.1 This part outlines the approaches used in determining the level of capital held by a Labuan bank against market risk⁶⁴ in its trading book, which comprises of:
- i. the interest/profit rate and equity risks pertaining to financial instruments in the trading book; and
 - ii. foreign exchange risk and commodities risk in the trading and banking books.
- 4.2 In determining the consolidated minimum capital requirement, market risk positions in each subsidiary can be netted against positions in the remainder of the group if:
- i. the risk positions of the group are centrally managed; and
 - ii. there are no obstacles to quick repatriation of profits from a foreign subsidiary or legal and procedural difficulties in operationalising timely risk management on a consolidated basis.

Scope of the Capital Charges

- 4.3 The market risk capital charge in this framework is divided into interest/profit rate risk, equity risk, foreign exchange risk, and commodities risk charges. Labuan banks that have any exposure arising from specific and loss-bearing fund placements/deposits made with Islamic banks or Islamic banking operations shall be subject to the 'look-through' approach as described in **Appendix XVII**.
- 4.4 The capital charges for interest/profit rate and equity are applied to the current market value of interest/profit rate and equity related financial instruments or positions in the trading book. The capital charge for foreign exchange risk and commodities risk however are applied to all foreign currency⁶⁵ and commodities

⁶⁴ Market risk is defined broadly as the risk of losses in on and off-balance sheet positions arising from movements in market prices.

⁶⁵ However, Labuan banks are given some discretion to exclude structural foreign exchange positions from the computation.

positions. Some of the foreign exchange and commodity positions will be reported and hence evaluated at market value, while some may be reported and evaluated at book value.

Approaches to Measuring Market Risks

4.5 In measuring capital charge for market risk, Labuan banks have to use the standardised approach.

Standardised Approach

4.6 Standardised approach is based on a building block approach where standardised supervisory capital charge is applied separately to each risk category.

D.1.1 PRUDENT VALUATION GUIDANCE

4.7 This part provides Labuan banks with guidance on prudent valuation for positions in the trading book. This guidance is especially important for less liquid positions which, although not excluded from the trading book solely on grounds of lesser liquidity, would raise issues relating to valuation.

4.8 A framework for prudent valuation practices should at a minimum adhere to the requirements specified in paragraph 4.9 to 4.15, covering systems and controls, valuation methodologies, independent price verification, valuation adjustments/reserves.

Systems and Controls

4.9 Labuan banks must establish and maintain adequate systems and controls sufficient to give the management and Labuan FSA's supervisors the confidence that 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 be supported by:

- i. Board-approved policies and procedures on valuation process. This includes clearly defined responsibilities of the various parties involved in the valuation process, sources of market information and review of their appropriateness, frequency of independent valuation, method of determining closing prices, procedures for adjusting valuations, end of the month and ad-hoc verification procedures; and
- ii. Clear and independent (i.e. independent of front office) reporting lines for the department accountable for the valuation process.

Valuation Methodologies

- 4.10 Labuan banks should mark-to-market portfolio positions, at least on daily basis, based on 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. The more prudent side of bid/offer must be used unless the Labuan bank is a significant market maker in a particular position type and it can close out at mid-market.
- 4.11 Where mark-to-market is not possible, Labuan 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. When marking to model, an extra degree of conservatism is appropriate. Labuan FSA will consider the following in assessing whether a mark-to-model valuation is prudent:
 - i. Senior management awareness on the assumptions used in constructing the model and their understanding on the materiality of the assumptions used and its impacts in the reporting of the risk/performance of the business;
 - ii. Regular review of the appropriateness of the market inputs for the particular positions. Market input for instance, should reflect market prices to the extent possible;

- iii. Consistent adoption of generally accepted valuation methodologies for particular products, where available and appropriate;
- iv. Use of appropriate assumptions, which have been assessed and challenged by suitably qualified parties independent of the development process. In cases where the models are internally developed, 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;
- v. Formal change control procedures in place to govern any changes made to the model and a secure copy of the model should be held and periodically used to check valuations;
- vi. Risk managers awareness of the weaknesses of the models used and how best to reflect those in the valuation output;
- vii. Periodic review to determine the accuracy of the model's performance (for example, assessing continued appropriateness of the assumptions, analysis of P&L versus risk factors, comparison of actual close out values to model outputs); and
- viii. Formal valuation adjustments in place where appropriate, for example, to cover the uncertainty of the model valuation.

Independent Price Verification

- 4.12 In addition, Labuan banks should also conduct regular independent verification of market prices or model inputs for accuracy. 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 is to reveal any error or bias in pricing, which should result in the elimination of inaccurate daily marking.

- 4.13 Independent price verification should be subjected to a higher standard of accuracy since the market prices or model inputs would be used to determine profit and loss figures, whereas daily markings are used primarily for management reporting in between reporting dates. For independent price verification, where pricing sources are more subjective, for example, only one available broker quote, prudent measures such as valuation adjustments may be appropriate.

Valuation Adjustments

- 4.14 Labuan banks must establish and maintain procedures for considering valuation adjustments which should be deducted in the calculation of CET1 Capital. The following valuation adjustments shall be formally considered where relevant: unearned credit spreads, close-out costs, operational risks, early termination, investing and funding costs, future administrative costs and, if appropriate, model risk.
- 4.15 In addition, Labuan bank shall consider the need for establishing an appropriate adjustment for less liquid positions. The appropriateness of the adjustments shall be subjected to an ongoing review. Reduced liquidity could arise from structural and/or market events. In addition, close-out prices for concentrated positions and/or stale positions are more likely to be adverse. Labuan banks shall, at the minimum, consider several factors when determining whether valuation adjustment is necessary for less liquid items. These factors include the amount of time it would take to hedge out the risks within the position, the average volatility of bid/offer spreads, the availability of market quotes (number and identity of market makers), and the average and volatility of trading volumes.

D.1.2 CLASSIFICATION OF FINANCIAL INSTRUMENTS

Trading Book Policy Statement

- 4.16 Labuan banks must have a trading book policy statement with clearly defined policies and procedures for determining which exposures to include in, and to exclude from, the trading book for purposes of calculating regulatory capital. Board

and senior management of Labuan banks should ensure compliance with the criteria for trading book set forth in this chapter taking into account the Labuan bank's risk management capabilities and practices. In addition, compliance with these policies and procedures must be fully documented and subject to periodic internal audit. This policy statement and material changes to it would be subject to Labuan FSA's review.

4.17 These policies and procedures should, at a minimum, address the following general considerations:

- i. Activities Labuan bank considers as trading and what constitute part of the trading book for regulatory capital purposes;
- ii. The extent to which an exposure can be marked-to-market daily by reference to an active, liquid two-way market;
- iii. For exposures that are marked-to-model, the extent to which the Labuan bank can:
 - a. identify the material risks of the exposure;
 - b. hedge the material risks of the exposure and the extent to which hedging instruments would have an active, liquid two-way market;
 - c. derive reliable estimates for the key assumptions and parameters used in the model.
- iv. The extent to which Labuan bank can and is required to generate valuations for exposure that can be validated externally in a consistent manner;
- v. The extent to which legal restrictions or other operational requirements would impede Labuan bank's ability to effect an immediate liquidation of the exposure;
- vi. The extent to which the Labuan bank is required to, and can, actively risk manage the exposure within its trading operations; and
- vii. The extent to which the Labuan bank may transfer risk or exposures between the banking and the trading books and criteria for such transfers.

- 4.18 The above considerations, however, should not be treated as an exhaustive and rigid set of tests that a product or group of related products must pass for eligibility in the trading book. Rather, the list should serve as minimum or most fundamental areas for considerations for overall management of a Labuan bank's trading book. It should also be supported by detailed policies and procedures.

Definition of Trading Book

- 4.19 The trading book consists of positions in financial instruments and commodities held either with trading intent or to hedge other elements of the trading book. To be eligible for trading book capital treatment, financial instruments must either:

- i. be free of any restrictive covenants on tradability; or
- ii. be able to be hedged.

In addition,

- iii. positions should be frequently and reliably valued; and
- iv. portfolio is actively managed.

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

Financial Instruments

A financial instrument is a 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 derivative 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.

4.21 The following are the basic eligibility requirements for positions to receive trading book capital treatment:

- i. Clearly documented overall trading strategy for positions/portfolios contained within the trading book as approved by senior management (which would include expected holding horizon etc.).
- ii. Clearly defined policies and procedures for active management of the positions, which must include requirements for:
 - a. management of positions by a trading desk;
 - b. setting and monitoring of position limits to ensure their appropriateness;
 - c. dealers to be given the autonomy to enter into/manage the position within agreed limits and according to the agreed strategy;
 - d. marking-to-market of positions at least daily and when marking-to-model, relevant parameters (for example volatility inputs, market risk factors, etc) to be assessed regular basis;
 - e. reporting of positions to senior management as an integral part of the Labuan bank's risk management process; and

- f. actively monitoring of positions with references 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, size of positions traded in the market, etc.
 - iii. Clearly defined policies and procedures to monitor the positions against the Labuan bank's trading strategy including the monitoring of turnover and stale position in the Labuan bank's trading book.
- 4.22 All other exposures that are not defined as trading book positions should be classified as exposures in the banking book. This will include both on- and off-balance sheet positions.

Classification of Specific Financial Instruments

- 4.23 Equity investments called for by the Federal Government of Malaysia, BNM, shall be treated as banking book positions where the capital requirement is set forth in paragraph 2.42.
- 4.24 All defaulted financial instruments will be treated as banking book positions and will be subjected to the capital requirement of this framework.
- 4.25 Generally, all derivative instruments should be classified in the trading book except for derivatives which qualify as hedges for banking book positions. However, certain credit derivatives instruments and structured investments may be classified as banking book positions particularly for long-term investments which are illiquid and/or have significant credit risk elements.
- 4.26 Repo and reverse repo transactions shall be assessed based on the trading book definition outlined in paragraphs 4.19 to 4.22.

D.1.3 TREATMENT OF MONEY MARKET INSTRUMENTS IN TRADING BOOK

4.27 Money market transactions such as the issuance and purchase of Negotiable Instrument of Deposits (NIDs), treasury bills, banker's acceptances, commercial papers and interbank borrowings and lendings, may be recognised in the trading book provided they fulfil the requirements set in paragraphs 4.19 to 4.22. Such money market transactions identified for inclusion in the trading book should be committed at market rates, and appropriately identified⁶⁶ by the trading desk at deal inception as transactions made with the trading intent consistent with the definition in paragraph 4.20. Customer deposits and loans/financing do not qualify for this treatment since these products fall outside the definition of money market instruments.

Controls to Prevent Regulatory Capital Arbitrage

4.28 Regulatory capital arbitrage arises when a position attracts a different regulatory capital requirement depending on its classification. It is the responsibility of Labuan banks' compliance officers, risk manager and/or internal auditors to ensure that proper procedures are in place, and items are properly classified into either the trading or banking books.

4.29 Labuan banks must ensure that classification of financial instruments are determined up-front and clear audit trails are created at the time the transactions are entered into, to facilitate monitoring of compliance. These audit trails and documentation should be made available to Labuan FSA's supervisors upon request.

4.30 To ensure that financial instruments held for trading are not included in the banking book, financial instruments in the banking book shall not be sold unless prior approval of the board has been obtained. In turn, the board shall ensure that there

⁶⁶ The identified money market transactions may be entered with either a third party or with the banking book desk (internal deals). In addition to the requirements set in paragraph 4.31, internal deals must be institutionalised and documented in banking institutions' policies and procedures and should be supported by a robust fund transfer pricing (FTP) system.

is no element of intention to trade when selling banking book positions. Each Labuan bank shall include this requirement in the trading book policy statement.

- 4.31 Authority to sell banking book instruments may be delegated to Asset and Liability Management Committee (ALCO) or Risk Management Committee (RMC) or any board-appointed signatories provided that the board spells out the specific policies under which such delegation may be applied. The policy should include at the minimum the following parameters:
- i. the sale does not tantamount to a trading position; and
 - ii. the board be informed of the sale of the banking book instruments soonest possible.
- 4.32 Supervisory intervention involving remedial actions may be instituted if there is evidence that Labuan banks undermine the capital adequacy requirements through improper classification of financial instruments between the trading and banking books. Labuan FSA may, for instance, require Labuan banks to reclassify banking book positions which exhibit patterns of regular trading to the trading book and vice versa.

Treatment of Hedging Positions

- 4.33 In general, a hedge can be defined as a position that materially or entirely offsets the component risk elements of another position or portfolio.
- 4.34 Labuan banks are required to have board-approved written policies which document the criteria of a hedge position and its effectiveness⁶⁷. Labuan banks are required to identify hedge positions at the time the hedging positions are created and to monitor and document with clear audit trails the subsequent performance of the positions.

⁶⁷ Labuan FSA does not expect the standards for hedging requirements for purpose of this framework to be identical to that required under the accounting standards.

4.35 Trading book positions entered with a third party to hedge banking book positions are carved out and not subject to market risk capital charge provided the following conditions are satisfied:

- i. Approval of ALCO/RMC or any authorities delegated by the board is obtained with endorsement that the positions comply with internal hedge policies;
- ii. At the inception of the hedge, there is proper documentation of the hedge relationship and the Labuan bank's risk management objectives and strategy for undertaking the hedge. Documentation should include:
 - a. the description of the hedge and the financial instruments designated as the hedging instruments and their values;
 - b. the nature of the risk being hedged and demonstrate how the risk is being reduced by the hedge;
 - c. defining the acceptable level of hedging effectiveness and periodically assessing the hedging instrument's effectiveness in offsetting the risk of the underlying exposure; and
 - d. the treatment of the hedging instrument and the underlying exposure when the hedge ceases to be effective.
- iii. The identification and tagging of the underlying hedged portfolio/ transaction and hedge instrument are done upfront; and
- iv. The hedge is materially effective in offsetting the risk element of the hedged exposure. The actual performance of the hedge should be back tested against the expected performance as documented at inception. When the hedge position ceases to be effective or when the underlying banking book position ceases, the hedging relationship should be derecognised. The derivatives should be reclassified as trading book transactions and be subject to market risk capital charge.

- 4.36 When internal hedging transactions are entered into between the trading and banking book to hedge banking book market risk exposures, the trading book leg of the transaction shall be subject to market risk capital charge provided that the internal hedging transaction complies with the requirements set in paragraph 4.35.
- 4.37 However, internal hedging transactions between the trading and banking book to hedge a banking book credit risk exposure using a credit derivative are not recognised for capital purposes unless the Labuan bank purchases a credit derivative meeting the requirements of the credit risk component of this framework from an eligible third party protection provider. Where such third party protection is purchased and is recognised as a hedge of a banking book exposure for regulatory capital purposes, the internal or external credit derivative hedge would be carved out from the trading book and would not be subject to the regulatory capital in this framework.

D.1.4 TREATMENT OF COUNTERPARTY CREDIT RISK IN THE TRADING BOOK

- 4.38 Labuan banks will be required to calculate the counterparty credit risk charge for over the counter (OTC) derivatives, repo-style and other transactions classified in the trading book, in addition to the capital charge for general market risk and specific risk.⁶⁸ The calculation of the counterparty credit risk charge will be based on the approaches as prescribed in the credit component of this framework. Labuan banks using the standardised approach in the banking book will use the standardised approach risk weights in the trading book.
- 4.39 Instruments in the trading book that are held under reverse repo transactions may be used as eligible collaterals. The haircut treatment for these eligible collaterals is prescribed in the credit risk component of this framework.

⁶⁸ The treatment for unsettled FX and securities trades are set forth in the credit risk component of the Guidelines.

Credit Derivatives

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

	Protection Buyer	Protection Seller
Total Return Swap		
Investment grade reference obligation	5%	5%
Non investment grade reference obligation	10%	10%
Credit Default Swap		
Investment grade reference obligation	5%	5%*
Non investment grade reference obligation	10%	10%*

There will be no difference depending on residual maturity.

Investment grade refers to securities with an external credit rating of BBB+ and above.

* The protection seller of a credit default swap shall only be subject to the add-on factor where it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent. Add-on should then be capped to the amount of unpaid premiums.

- 4.41 Where the credit derivative is a first to default transaction, the add-on will be determined by the lowest credit quality underlying in the basket that is if there are any non-qualifying items in the basket, the non-qualifying reference obligation add-on should be used. For second and subsequent to default transactions, underlying assets should continue to be allocated according to the credit quality that is the second lowest credit quality will determine the add-on for a second to default transaction etc.

D.2 THE STANDARDISED MARKET RISK APPROACH

D.2.1 INTEREST/PROFIT RATE RISKS

- 4.42 This part describes the standard framework for measuring the risk of holding or taking positions in debt securities/sukuk⁶⁹ and other interest/profit rate related financial instruments in the trading book. The financial instruments covered include all fixed-rate and floating-rate debt securities/sukuk and instruments that share similar characteristics as debt securities/sukuk, including non-convertible preference shares. Interest/profit rate exposures arising from forward foreign exchange transactions, derivatives and forward sales and purchases of securities⁷⁰ are also included. Convertible bonds, that is debt issues or preference shares that are convertible into common shares of the issuer, will be treated as debt securities/sukuk if the instruments trade like debt securities/sukuk or as equities.
- 4.43 Interest/profit rate sensitive instruments are normally affected by general changes in market interest/profit rate, known as general risk, and changes in factors related to a specific issuer, in particular issuer's credit quality, which would affect the instrument, known as specific risk.
- 4.44 The minimum capital requirement for interest/profit rate risk is the summation of the capital charges for:
- i. Specific risk of each security, whether it is a short or a long position; and
 - ii. General market risk where long and short positions in different securities or instruments may be offset.

⁶⁹ Includes private commercial enterprise's sukuk trading activities where the Islamic banking operation has musharakah and/or mudarabah financing.

⁷⁰ This includes primary issuance or underwriting of debt securities where rates have been fixed upfront for which the position would be treated as a bond forward or bond option transaction. Refer to Part D.2.5 Treatment of Options - Underlying Position Approach for capital charge calculation.

Specific Risk

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

Specific Risk Capital Charges for Issuer Risk

4.46 Table 2 provides the applicable specific risk charges for interest/profit rate related financial instruments for issuers of G10⁷¹ and non-G10 countries.

4.47 The specific risk charges for the holding of interest/profit rate related financial instruments issued by Labuan banks will be based on the external ratings⁷² of the Labuan banks while the specific risk charges for the holding of interest/profit rate related financial instruments issued by foreign sovereigns will be based on the external ratings of the foreign sovereigns. For example, if a Labuan banks holds a 5-year sovereign debt paper which has a sovereign rating of A, the specific risk charge will be 1.6% as provided in Table 2. In the case of interest/profit rate related financial instruments issued by corporates, in addition to maturity and external ratings, the country of establishment (that is G10 or non-G10) is also a factor in determining the amount of specific risk weights. For example, the holding of a AA rated Malaysian corporate debt paper with maturity of 3 years will attract a specific risk charge of 2.0%.

⁷¹ The Group of Ten (G10) is made up of eleven industrial countries namely Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States.

⁷² As illustrated in Table 2 or the equivalent standard rating category as specified in the credit component of the Guidelines.

Table 2: Specific Risk Charges for Interest/Profit Rate Related Financial Instruments

	Remaining Maturity									
	<= 6 mths		> 6m to 1 yr		> 1 to 2 yrs		> 2 to 5 yrs		> 5 yrs	
	G10 (%)	Non G10 (%)	G10 (%)	Non G10 (%)	G10 (%)	Non G10 (%)	G10 (%)	Non G10 (%)	G10 (%)	Non G10 (%)
Corporates & Securitisations^Ω										
P1 to P3 ^Θ	0.25	0.25	1.00	1.00						
AAA to A-	0.25	0.25	1.00	1.00	1.00	2.00	1.60	2.00	1.60	3.00
BBB+ to BBB-	0.25	0.25	1.00	1.00	1.00	2.00	1.60	3.50	1.60	4.50
BB+ to B-	8.00									
Below B-	12.00									
Unrated	8.00									
Banking Institutions[^]										
AAA to A-	0.25		1.00		1.00		1.60		1.60	
BBB+ to BBB-	0.25		1.00		2.00		2.00		3.00	
BB+ to B-	8.00									
Below B-	12.00									
Unrated	0.25		1.00		2.00		2.00		3.00	
Public Sector Entities (PSE)*	0.25		1.00		1.00		1.60		1.60	
Malaysian Government[#]	0									
Foreign Sovereigns										
AAA to AA- \$	0									
A+ to BBB-			0.25	1.00	1.00	1.60	1.60			
BB+ to B-	8.00									
Below B-	12.00									
Unrated	8.00									

Θ Also applicable for exposures to IILM Sukuk.

- Ω A specific risk charge of 100 would apply for securitisation exposures held in the trading book if that exposure is subject to a 1250% risk weight if held in the banking book.
- ^ Including interest/profit rate related financial instruments issued and guaranteed by licensed banking institutions and licensed development financial institutions as well as Multilateral Development Banks (MDBs) which do not qualify for preferential risk weight described in paragraph 2.22.
- * Refer to the credit risk component of this framework for the criteria of PSE.
- # Including interest/profit rate related financial instruments issued or guaranteed by the Malaysian Government or BNM, as well as securities issued through special purpose vehicles e.g. BNM Sukuk Ijarah and BNMNi-Murabahah issued through BNM Sukuk Berhad. However, Labuan banks shall apply the look-through approach as specified under Appendix XVII for BNM *Mudarabah* certificate (BMC).
- § Including exposures to highly-rated Multilateral Development Banks (MDBs) that qualify for the preferential risk weight as described in paragraph 2.22.

4.48 In cases where specific risk is considerably underestimated, often involving debt instruments/sukūk which have a high yield to redemption relative to government debt securities/sukūk, Labuan FSA may:

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

4.49 Securitisation exposures held in the trading book shall be subject to the capital requirements in the market risk component of this framework, applying the specific risk charges applicable to corporates as per Table 2. However, exposures subjected to a risk weight of 1250% under the Securitisation Framework should similarly be subjected to a 100% capital charge if they are held in the trading book. As an exception, the treatment specified in paragraph 6.14 need not apply for such securitisation exposures retained in the trading book during the first 90 days from the date of issuance.

Specific Risk Capital Charges for Positions Hedged by Credit Derivatives

4.50 Full allowance will be recognised when the values of two legs (that is long and short) always move in the opposite direction and broadly to the same extent. This would be the case in the following situations:

- i. the two legs consist of completely identical instruments; or

- ii. a long cash position is hedged by a total rate of return swap (or vice versa) and there is an exact match between the reference obligation and the underlying exposure (that is the cash position).⁷³

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

- 4.51 An 80% offset will be recognised when the value of two legs (that is long and short) always moves in the opposite direction but not broadly to the same extent. This would be the case when a long cash position is hedged by a credit default swap or a credit linked note (or vice versa) and there is an exact match in terms of the reference obligation, the maturity of both the reference obligation and the credit derivative, and the currency to the underlying exposure. In addition, key features of the credit derivative contract (for example credit event definitions, settlement mechanisms) should not cause the price movement of the credit derivative to materially deviate from the price movements of the cash position. To the extent that the transaction transfers risk (that is taking account of restrictive payout provisions such as fixed payouts and materiality thresholds), an 80% specific risk offset will be applied to the side of the transaction with the higher capital charge, while the specific risk requirement on the other side will be zero.
- 4.52 Partial allowance will be recognised when the values of the two legs (that is long and short) usually moves in the opposite direction. This would be the case in the following situations:
- i. the position is captured in paragraph 4.50 (ii), but there is an asset mismatch between the reference obligation and the underlying exposure. Nonetheless, the position meets the requirements spelt out in the 'Additional Operational Requirements for Credit Derivatives' in the credit risk component of this framework.

⁷³ The maturity of the swap itself may be different from that of the underlying exposure.

- ii. the position is captured in paragraphs 4.50 (i) or 4.51 but there is a currency or maturity mismatch⁷⁴ between the credit protection and the underlying asset.
 - iii. the position is captured in paragraph 4.51 but there is an asset mismatch between the cash position and the credit derivative. However, the underlying asset is included in the (deliverable) obligations in the credit derivative documentation.
- 4.53 In cases outlined in paragraphs 4.50 to 4.52, rather than adding the specific risk capital requirements for each side of the transaction (that is the credit protection and the underlying asset) only the higher of the two capital requirements will apply.
- 4.54 In cases not captured in paragraphs 4.50 to 4.52, a specific risk capital charge will be applied against both sides of the positions.
- 4.55 With regard to Labuan banks' first-to-default and second-to-default products in the trading book, the basic concepts developed for the banking book will also apply. Labuan banks holding long positions in these products (for example buyers of basket credit linked notes) would be treated as if they are protection sellers and would be required to apply the specific risk charges on each of the underlying position based on the external⁷⁵ rating of the respective underlying reference asset, if available. Issuers of these notes would be treated as if they are protection buyers and are therefore allowed to off-set specific risk for one of the underlyings, that is the asset with the lowest specific risk charge.

General Interest/Profit Rate Risk

- 4.56 The capital requirements for general risk are designed to capture the risk of loss arising from changes in market interest/profit rates. Within the standardised approach, Labuan bank may choose to adopt either the 'maturity' method or the 'duration' method. Upon adoption of a method, Labuan banks are not allowed to

⁷⁴ Currency mismatches should be reported under Part D.2.3 Foreign Exchange Risk.

⁷⁵ As specified under the credit component of the Guidelines.

switch between methods without the consent of Labuan FSA. Under each method, positions are allocated across a maturity ladder template of time bands and the capital charge is then calculated as the sum of four components:

- i. the net short or long weighted position across the entire time bands⁷⁶;
- ii. the smaller proportion of the matched positions in each time band to capture basis risk (the 'vertical disallowance');
- iii. the larger proportion of the matched positions across different time bands to capture yield curve risk (the 'horizontal disallowance'); and
- iv. a net charge for positions in options, where appropriate (refer to Part D.2.5 Treatment of Options).

4.57 Separate maturity ladder templates should be used for positions exposed to different currency interest/profit rate risk. Capital charges for general interest/profit rate risk should be calculated for each currency separately and then aggregated with no offsetting between positions of different currencies. Two different sets of risk weights (Table 3) and yield changes (Table 5) would be applicable depending on whether the interest/profit rate related financial instrument is exposed to a G10 or non-G10 currency interest/profit rate risk. Zero-coupon bonds/sukūk and deep-discount bonds/sukūk (defined as bonds/sukūk with a coupon less than 3%) should be slotted according to the time-bands set out in the third column of Table 3.

⁷⁶ Positions include delta-weighted option position in the case where the institution decides to use the Delta-plus Method for the treatment of options.

Offsetting of Matched Positions

- 4.58 In calculating general risk, Labuan banks may exclude all long and short positions (both actual and notional) in identical instruments with the same issuer, coupon, currency and maturity, from the calculations. No offsetting will be allowed between positions in different currencies; the separate legs of cross-currency swaps or forward foreign exchange deals are treated as notional positions in the relevant instruments and included in the appropriate calculation for each currency interest/profit rate risk.

Maturity Method

- 4.59 Under the maturity method, the market value of long or short positions in debt securities/sukūk and other sources of interest/profit rate exposures, including derivative instruments, are slotted into the relevant time bands as specified in Table 3. Fixed-rate instruments shall be allocated according to the residual term to maturity and floating-rate instruments according to the residual term to the next repricing date.
- 4.60 The first step in the calculation of the capital charge is to weight the positions in each time band by a risk weight designed to reflect the price sensitivity of those positions to assumed changes in interest/profit rates. The risk weights for each time band are set out in the fourth and fifth column of Table 3 below according to either G10 or non-G10 countries' currencies. The net short or long weighted position is then obtained.

**Table 3: General Interest/Profit rate Risk weights for Financial Instruments
Exposed to G10 or Non-G10 Currency**

Zone	Time Bands (Coupon 3% or more)	Time Bands (Coupon less than 3%)	G10 Risk weight (%)	Non-G10 Risk weight (%)
1	1 month or less	1 month or less	0.00	0.00
	> 1 and up to 3 months	> 1 and up to 3 months	0.20	0.20
	> 3 and up to 6 months	> 3 and up to 6 months	0.40	0.50
	> 6 and up to 12 months	> 6 and up to 12 months	0.70	0.80
2	> 1 and up to 2 years	> 1.0 and up to 1.9 years	1.25	1.30
	> 2 and up to 3 years	> 1.9 and up to 2.8 years	1.75	1.90
	> 3 and up to 4 years	> 2.8 and up to 3.6 years	2.25	2.70
3	> 4 and up to 5 years	> 3.6 and up to 4.3 years	2.75	3.20
	> 5 and up to 7 years	> 4.3 and up to 5.7 years	3.25	4.10
	> 7 and up to 10 years	> 5.7 and up to 7.3 years	3.75	4.60
	> 10 and up to 15 years	> 7.3 and up to 9.3 years	4.50	6.00
	> 15 and up to 20 years	> 9.3 and up to 10.6 years	5.25	7.00
	> 20 years	> 10.6 and up to 12 years	6.00	8.00
		> 12 and up to 20 years	8.00	10.40
		> 20 years	12.50	16.40

Vertical Disallowance

- 4.61 The next step in the calculation is to offset the weighted longs and short within each time band, resulting in a single short or long position for each band.
- 4.62 Since each band would include different instruments and different maturities, a 10% capital charge to reflect basis risk and gap risk will be levied on the smaller of the offsetting positions (that is the matched position), be it long or short, in each time band. Thus, if the sum of the weighted longs in a time band is USD100 million and the sum of the weighted shorts is USD90 million, the so-called 'vertical disallowance' for that time band would be 10% of USD90 million (that is USD9 million).

Horizontal Disallowance

4.63 From the results of the above calculations, two sets of weighted positions, the net long or short position in each time band, would be produced. The maturity ladder is then divided into three zones defined as zero to one year, more than one year to four years and more than four years. Labuan banks will then conduct two further rounds of offsetting, first between the net time band positions within each zone and secondly between the net positions across the three different zones (that is, between adjacent zones and non-adjacent zones). The residual net position in each zone may be carried over and offset against opposite positions in other zones when calculating net positions between zones 2 and 3, and 1 and 3. The offsetting will be subjected to a scale of disallowances expressed as a fraction of the matched positions, as set out in Table 4 when calculating subject to a second set of disallowance factors.

Table 4: Horizontal Disallowances

Zones	Time Band	Within the Zone	Between Adjacent Zones	Between Zones 1 and 3
Zone 1	0 – 1 month > 1 – 3 months > 3 – 6 months > 6 – 12 months	40%	40%	100%
Zone 2	> 1 – 2 years > 2 – 3 years > 3 – 4 years	30%		
Zone 3	> 4 – 5 years > 5 – 7 years > 7 – 10 years > 10 – 15 years > 15 – 20 years > 20 years	30%		

4.64 The general risk capital requirement will be the sum of:

Net Position	Net Short or Long Weighted Positions	x 100%
Vertical Disallowances	Matched Weighted Positions ⁷⁷ in all Maturity Bands	x 10%
Horizontal Disallowances	Matched Weighted Positions within Zone 1	x 40%
	Matched Weighted Positions within Zone 2	x 30%
	Matched Weighted Positions within Zone 3	x 30%
	Matched Weighted Positions Between Zones 1 & 2	x 40%
	Matched Weighted Positions Between Zones 2 & 3	x 40%
	Matched Weighted Positions Between Zones 1 & 3	x 100%

An example of the calculation of general risk is set out in **Example 1**.

⁷⁷ The smaller of the absolute value of the short and long positions within each time band.

Duration Method

4.65 Under the alternative duration method, Labuan banks with the necessary capability may use a more accurate method of measuring all their general risk by calculating the price sensitivity of each position separately. Labuan banks which elect to use this method must do so consistently. The mechanics of this method are as follows:

- i. calculate the price sensitivity of each instrument in terms of a change in interest/profit rates of between 0.8 and 1.5 percentage points for instruments denominated in non-G10 countries' currencies and between 0.6 and 1.0 percentage point for instruments denominated in G10 countries' currencies (refer to Table 5) depending on the maturity of the instrument;
- ii. slot the resulting sensitivity measures into a duration-based ladder in the thirteen time bands set out in the second column of Table 5 and obtain the net position;
- iii. subject long and short positions in each time band to a 5% vertical disallowance to capture basis risk in the same manner as per paragraph 4.62; and
- iv. carry forward the net positions in each time band for horizontal offsetting subject to the disallowances set out in Table 4 in the same manner as per paragraph 4.63.

The market risk capital charge will be the aggregation of the three charges described in paragraph 4.64.

**Table 5: Changes in Yield for Financial Instruments Exposed to
G10 and Non-G10 Currency Interest/Profit Rate Risk**

Zone	Time Bands (Coupon 3% or more)	Time Bands (Coupon less 3%)	G10 Changes in Yield (%)	Non-G10 Changes in Yield (%)
1	1 month or less	1 month or less	1.00	1.50
	> 1 - 3 months	> 1 - 3 months	1.00	1.50
	> 3 - 6 months	> 3 - 6 months	1.00	1.40
	> 6 - 12 months	> 6 - 12 months	1.00	1.20
2	> 1- 2 years	> 1.0 - 1.9 years	0.90	1.00
	> 2 - 3 years	> 1.9 - 2.8 years	0.80	0.90
	> 3 - 4 years	> 2.8 - 3.6 years	0.75	0.90
3	> 4 - 5 years	> 3.6 - 4.3 years	0.75	0.90
	> 5 - 7 years	> 4.3 - 5.7 years	0.70	0.90
	> 7 - 10 years	> 5.7 - 7.3 years	0.65	0.80
	> 10 - 15 years	> 7.3 - 9.3 years	0.60	0.80
	> 15 - 20 years	> 9.3 - 10.6 years	0.60	0.80
	> 20 years	>10.6 - 12 years	0.60	0.80
		> 12 - 20 years	0.60	0.80
		> 20 years	0.60	0.80

Treatment of Interest/Profit Rate Derivatives, Repo and Reverse Repo Transactions

4.66 The market risk measurement system should include all interest/profit rate derivatives, off-balance sheet instruments, repos and reverse repos in the trading book which would react to changes in interest/profit rates (for example forward rate agreements (FRAs), other forward contracts, bond futures, interest/profit rate and cross-currency swaps and forward foreign exchange positions). Options can be treated in a variety of ways as described in Part D.2.5 Treatment of Options.

4.67 Derivatives should be converted into positions in the relevant underlying and subject to general risk charges. To determine the capital charge under any of the two standardised methods described above, the amounts reported should be the market value of the principal amount of the underlying or of the notional underlying. Treatment of the interest/profit rate derivative positions by product class is described in Box 1. A summary on the treatment for interest/profit rate derivatives is set out in Table 6.

Table 6: Summary of Treatment of Interest/Profit Rate Derivatives, Repo and Reverse Repos under the Standardised Market Risk Approach

Instrument	Specific Risk*	General Risk
<i>Exchange-Traded Futures/OTC Forwards</i>		
- Malaysian Government debt security	No	Yes, as two positions ⁺
- Foreign sovereigns debt security	Yes [^]	Yes, as two positions ⁺
- Corporate debt security	Yes	Yes, as two positions ⁺
- Index on interest/profit rates	No	Yes, as two positions ⁺
<i>FRAs, Swaps</i>	No	Yes, as two positions ⁺
<i>Forward Foreign Exchange</i>	No	Yes, as two position in each currency ⁺
<i>Options</i>		
- Malaysian Government debt security	No	Either
- Foreign sovereigns debt security	Yes [^]	(a) <u>Simplified Approach</u> :
- Corporate debt security	Yes	Carve out together with the associated hedging positions for general risk only and reflect under Part D.2.5 ;
- Index on interest/profit rates	No	Or
- FRAs, Swaps	No	(b) <u>Delta-Plus Method</u> :
		Include the delta weighted option position into the respective time bands according to its underlying. (Gamma and Vega risk should each receive a

Instrument	Specific Risk*	General Risk
		separate capital charge and calculated under Part D.2.5); Or (c) <u>Scenario Approach</u> : Carve out together with the associated hedging positions for general risk only and reflect under Part D.2.5
Repo	No	Yes, as 1 position ⁺
Reverse Repo	No	Yes, as 1 position ⁺

* This refers to the specific risk charge relating to the issuer of the financial instrument. There remains a separate risk charge for counterparty credit risk which is set forth in the credit risk component of the Guidelines.

^ The specific risk capital charge only applies to foreign sovereign debt securities that are rated below AA-

+ Refer to Box 1 for more details on method of recording the position.

4.68 While interest/profit rate and cross-currency swaps, FRAs, forward foreign exchange contracts and interest/profit rate futures will not be subject to a specific risk charge, they are subjected to counterparty credit risk which is set forth in the credit risk component of this framework. Similar treatment also applies to futures on an interest rate index (for example 3-month KLIBOR). In the case of contracts where the underlying is a specific debt security/*sukūk*, or an index representing a basket of debt securities/*sukūk*, a specific risk charge will apply.

4.69 All derivative products are subject to general market risk in the same manner as cash positions, with the exception of fully matched positions in identical instruments. The various categories of instruments should be slotted into the maturity ladder and treated according to the rules identified earlier.

4.70 A Summary of the treatment for credit derivatives in the trading book is set out in **Appendix XIX**.

Futures and Forward Contracts, including Forward Rate Agreements (FRAs)

These instruments (with the exception of futures or forwards on corporate bonds, corporate bond indices or other corporate securities) are treated as a combination of a long and a short position in a notional government security. The maturity period of futures or FRAs will be the period until delivery or exercise of the contract, plus – where applicable – the life of the underlying instrument. For example, a long position in a June three month interest/profit rate future (taken in April) is to be regarded as a long position in a government security with a maturity of five months and a short position in a government security with a maturity of two months.

In the case of a future or forward on a corporate bond or corporate bond index, positions will be included at the market value of the notional underlying security/portfolio of securities. In the case of foreign currency forward contracts, either a long or a short position in the market value of each underlying currency leg would be recorded in the respective maturity ladder templates capturing the relevant currency interest/profit rate risk.

Swaps

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

For swaps that pay or receive a fixed or floating interest/profit rate against some other reference price, for example a stock index, the interest/profit rate component should be slotted into the appropriate repricing maturity category, with the equity component being included in the equity framework. The separate

legs of cross-currency swaps are to be reported at market value in the relevant maturity ladders for the currencies concerned.

Risk Arising from Repo Transactions

Arising from pledging/selling of securities and receiving cash with an agreement to repurchase securities or repayment of cash at the agreed future date. The classification of repo transactions should be based on the trading book definition, hence it can be classified either as a trading (for example repo to fund trading book positions) or banking book position (for example repo to fund banking book positions).

Trading Book Repo

General Risk

- Arising from short cash position.
- Recording: short the value of the repo (cash leg) based on the remaining maturity of the repo.

Counterparty Credit Risk

- The net exposure arising from the swapping of securities and cash with the repo counterparty at maturity of the repo.
- Recording: Treated as credit risk under the credit risk component of this framework.

Risk of the Underlying Securities

- Irrespective of whether the underlying security is from the banking or trading book, its respective credit risk or market risk shall remain.

Banking Book Repo

Counterparty Credit Risk

- The net exposure arising from the lending of securities and borrowing cash.
- Recording: Treated as a banking book counterparty credit risk charge under the credit risk component of this framework for repo style transactions.

Risk of the Underlying Securities

- Irrespective of whether the underlying security is from the banking or trading book, its respective credit risk or market risk shall remain.

Risk Arising from Reverse Repo Transactions

Arising from borrowing/buying of securities in exchange for cash with an agreement to resell securities or receive cash at the agreed future date. The classification of reverse repo transactions should be based on the trading book definition, hence it can be classified either as a trading or banking book position.

Trading Book Reverse Repo

General Risk

- Arising from long cash position.
- Recording: long the value of the reverse repo based on the remaining maturity of the reverse repo.

Counterparty Credit Risk

- The net exposure arising from the borrowing/buying of securities in exchange for cash with the reverse repo counterparty at maturity of the reverse repo.
- Recording: Treated as credit risk under the credit risk component of this framework.

Banking Book Reverse Repo

Counterparty Credit Risk

- The net exposure arising from the lending of cash collateralised by securities.
- Recording: Treated as a banking book counterparty credit risk charge under the credit risk component of this framework for reverse repo style transactions.

For the capital treatment for SBBA and reverse SBBA transactions, please refer to **Appendix XV**.

Options

Three methods (Simplified Approach, Delta-Plus Method and Scenario Approach) are available under Part D.2.5 Treatment of Options, on the treatment of interest/profit rate related options. Interest/Profit rate option positions and the underlying transactions will be carved out and capital provided separately for general risk if Labuan banks choose to use the simplified and scenario approach. However, if the delta-plus method is selected, the delta-weighted option position will be slotted into the respective time bands according to its underlying together with the other interest/profit rate related instruments. Nevertheless, under the delta-plus method, the Gamma and Vega risks will be separately calculated as described in Part D.2.5 Treatment of Options.

Example 1: Calculation of General Risk (Maturity Method) for Interest/Profit Rate Related Financial Instruments

1. Assume that a Labuan bank has the following positions in its trading book:
 - i. a Malaysian fixed rate private debt securities (PDS), USD13.33 million market value, residual maturity 8 years;
 - ii. a Malaysian government securities (MGS), USD75 million market value, residual maturity 2 months;

- iii. an interest/profit rate swap, USD150 million⁷⁸, the Labuan bank receives floating rate interest/profit and pays fixed, the next interest fixing occurs after 9 months, residual life of the swap 8 years;
 - iv. a long position in MGS futures of USD60 million⁷⁹, maturing in six months time, life of underlying government security 3.5 years; and
 - v. a Malaysian fixed rate trading book PDS, USD50 million market value, residual maturity of 5 years, sold under repo for three months.
2. Table A shows how these positions are slotted into the time bands and are weighted according to the weights given in column 5 of Table 3 (Risk weight for Non-G10 countries currency) of Part D.2.1 Interest/Profit Rate Risk. After weighting the positions, the calculation should proceed as follows:
- i. The overall net position is -2.12 million ($0.05 - 0.30 + 1.20 + 1.62 + 1.60 - 6.29$ million) leading to capital charge of USD2.12 million.
 - ii. The vertical disallowance in time bands 1-3 months and 7-10 years has to be calculated and the matched position in these time-bands (the lesser of the absolute values of the added weighted long and added weighted short positions in the same time-band) are 0.10 and 0.61 million respectively resulting in a capital charge of 10% of 0.71 million = USD0.07 million.
 - iii. The horizontal disallowances within the zones have to be calculated. As there are more than one position in zones 1 and 3, a horizontal disallowance need only be calculated in these zones. In doing this, the matched position is calculated as the lesser of the absolute values of the added long and short positions in the same zone and is 0.30 and 1.60 million in zones 1 and 3

⁷⁸ The position should be reported as the market value of the notional underlying. Depending on the current interest/profit rate, the market value of each leg of the swap (that is the 8 year bond and the 9 month floater) can be either higher or lower than the notional amount. For simplicity, the example assumes that the current interest/profit rate is identical with the one the swap is based on, hence, the market value for both legs are identical.

⁷⁹ Similar to interest/profit rate swaps, the market value of each leg should be used.

respectively. The capital charge for the horizontal disallowance within zone 1 is 40% of 0.30 million = USD0.12 million and 30% of 1.60 million = USD0.48 million in zone 3. The remaining net weighted positions in zones 1 and 3 are +0.95 and -4.69 million respectively.

- iv. The horizontal disallowances between adjacent zones have to be calculated. After calculating the net position within each zones the following positions remain: zone 1: +0.95 million; zone 2: +1.62 million and zone 3: -4.69 million. The matched position between zones 2 and 3 is 1.62 million (the lesser of the absolute values of the long and short positions between adjacent zones). The capital charge in this case is 40% of 1.62 million = USD0.65 million.
- v. The horizontal disallowance between zones 1 and 3 has to be calculated. The matched position between zones 1 and 3 is 0.95 million (the lesser of the absolute values of the long and short positions between zones 1 and 3). The horizontal disallowance between the two zones is 100% of the lower of the matched position which leads to a capital charge of 100% of 0.95 million = USD0.95 million.

3. The total capital charge (USD million) in this example is:

- overall net open position	2.12
- vertical disallowance	0.07
- horizontal disallowance in zone 1	0.12
- horizontal disallowance in zone 3	0.48
- horizontal disallowance between adjacent zones	0.65
- horizontal disallowance between zones 1 and 3	0.95
Total	4.39

Table A: Maturity Method of Calculating General Risk of Interest/Profit Rate Related Financial Instruments (USD'million)

Time Bands	Zone 1				Zone 2			Zone 3								Total Charge
	Months				Years											
(Coupon 3% or more)	up to 1	> 1 - 3	> 3 - 6	> 6 - 12	> 1 - 2	> 2 - 3	> 3 - 4	> 4 - 5	> 5 - 7	> 7 - 10	> 10 - 15	> 15 - 20	over 20			
(Coupon less than 3%)					> 1 - 1.9	> 1.9 - 2.8	> 2.8 - 3.6	> 3.6 - 4.3	> 4.3 - 5.7	> 5.7 - 7.3	> 7.3 - 9.3	> 9.3 - 10.6	> 10.6 - 12	> 12 - 20	over 20	
Long Position		75 Govt Bond (ii)		150 Swap (iii)			60 Futures (iv)	50 PDS* (v)		13.33 PDS (i)						
Short Position		50 Repo (Cash) (v)	60 Futures (iv)							150 Swap (iii)						
Assigned Weights (%)	0.00	0.20	0.50	0.80	1.30	1.90	2.70	3.20	4.10	4.60	6.00	7.00	8.00	10.40	16.40	
Overall Net Open Position		+0.05	-0.30	+1.20			+1.62	+1.60		-6.29						2.12
Vertical Disallow.		0.10 x 10% = 0.01								0.61 x 10% = 0.06						0.07
Horizontal Disallow. 1	0.30 x 40% = 0.12							1.60 x 30% = 0.48								0.60
Horizontal Disallow. 2					1.62 x 40% = 0.65											0.65
Horizontal Disallow. 3	0.95 x 100% = 0.95															0.95
Total General Risk Charge																4.39

* General market risk for the underlying PDS remains in the trading book.

D.2.2 EQUITY POSITION RISK

4.71 This part sets out the minimum capital standard to cover the risk of equity⁸⁰ positions in the trading book. It applies to long and short positions in all instruments that exhibit market behavior similar to equities. The instruments covered include ordinary shares, whether voting or non-voting, convertible securities that behave like equities, and commitments to buy or sell equity securities. Non-convertible preference shares are to be excluded from these calculations as they are covered under the interest/profit rate risk requirements described in Part D.2.1 Interest/Profit Rate Risks. Equity derivatives and off-balance sheet positions such as futures, swaps and options on individual equity or stock indices are also included. Underwriting of equities⁸¹ should be included and regarded as an option instrument.

Specific and General Risk

4.72 The minimum capital standard for equities is expressed in terms of two separately calculated charges for the specific risk of holding a long or short position in an individual equity and for the general risk of holding a long or short position in the market as a whole. The long or short position in the market must be calculated on a market-by-market basis. Hence, a separate calculation has to be carried out for each national market in which the Labuan bank holds equities.

Specific Risk

4.73 Specific risk is defined as a proportion of the Labuan bank's sum of the absolute value of all net positions in each individual equity⁸² regardless of whether it is net long or net short. Matching opposite position for the same equity issuer may be

⁸⁰ Includes private commercial enterprise's equity trading activities where the Islamic banking operation has *mushārah* and/or *muḍārah* financing.

⁸¹ The underwriter is obliged to purchase equities at the issue price for unsubscribed equities which in effect is equivalent to writing a put option and the issuer as the holder of the put option has the right but not the obligation to sell the equities to the underwriter at the issue price.

⁸² Net position in each individual equity refers to the net of short and long exposure to an individual company.

netted-off. The charge for specific risk is listed in Table 7⁸³. Labuan FSA however, reserves the right to assign different risk weights to specific exposure in order to better reflect the risk characteristics of the exposure.

General Risk

4.74 General risk will be assessed on the difference between the sum of the longs and the sum of the shorts of all equity positions (that is the overall net position) in an equity market. The *general risk* charge is as provided in Table 7.

Table 7: Specific Risk and General Risk Charges for Equities and Equity Derivatives

Instrument	Specific risk	General risk
Equity and/or Equity Derivative (except Options) Positions with the following as Underlying:		
• KLCI equities	8%	8%
• Equities of G10 countries market indices	4%	8%
• Non-index equities of G10 stock exchanges	8%	8%
• All other equities	14%	8%
• Trust funds and Exchange Traded Funds	8%	8%
• KLCI and all market indices	2%	8%
• G10 countries market indices	2%	8%
• Other market indices	2%	8%
• Arbitrage** (Execution Risk)	2%	
Underwriting of Equity Underlying Position Approach: General and specific risk for underwriting IPO and rights issue is calculated by carving out the positions and reporting them based on the underlying position approach under Part D.2.5 Treatment of Options		

⁸³ If the Delta-plus method or the Scenario approach is selected to estimate the general risk of equity options, the specific risk of these positions will be calculated within this part as the multiplication of the delta weighted option underlying position and the risk weight for specific risk as provided in **Table 7**. However, if the Underlying Position approach is adopted, both specific risk and general risk of the equity option will be carved out and provided under Part D.2.5 Treatment of Options of paragraphs 4.110 and 4.111.

Instrument	Specific risk	General risk
<p>Equity Options</p> <p>1. <u>Simplified Approach:</u> This approach applies to limited range of purchase options only. Equity options and associated underlying cash positions are ‘carved-out’ and subject to separately calculated capital charges that incorporate both general market risk and specific risk under Part D.2.5 Treatment of Options; or</p> <p>2. <u>Delta-Plus Method:</u></p> <ul style="list-style-type: none"> i. For both specific risk and general risk charge, the delta weighted option position is multiplied with the relevant specific risk and general risk charge as provided above. ii. Gamma and Vega risk should each receive a separate capital charge calculated as per Part D.2.5 Treatment of Options; or <p>3. <u>Scenario Approach:</u></p> <ul style="list-style-type: none"> i. Specific risk is calculated by multiplying the delta weighted position of the option’s underlying by the specific risk charge as provided above. ii. General risk is calculated by carving out the options position together with its associated hedging positions and reflected under Part D.2.5 Treatment of Options. 		

** Refer to paragraphs 4.77 and 4.78.

Treatment of Equity Derivatives

4.75 Equity derivatives and off-balance sheet positions which are affected by changes in equity and equity index prices should be included in the measurement system⁸⁴. The equity derivatives are to be converted into positions in the relevant underlying and subjected to the following requirements:

- i. futures and forward contracts relating to individual equities are reported at current market prices;
- ii. futures relating to equity indices are reported either as the current index value times the monetary value of one index point set by the futures exchange-or market value of the notional underlying equity portfolio;

⁸⁴ Where equities are part of a forward contract, a future or an option (quantity of equities to be received or to be delivered), any interest/profit rate or foreign currency exposure from the other leg of the contract should be reported as set out in Part D.2.1 Interest/Profit Rate Risk and Part D.2.3 Foreign Exchange Risk.

- iii. equity swaps are treated as two notional positions⁸⁵;
- iv. underwriting of equity IPO position is carved out where capital charge for both specific risk and general risk are provided as described in Part D.2.5 Treatment of Options - Underlying Position Approach; and
- v. equity options and stock index options are treated under one of the four proposed methods in Part D.2.5 Treatment of Options that is simplified approach, scenario approach, delta-plus approach or internal models.

The treatment for equity derivatives is summarised in Table 7.

Offsetting of Matched Equity Derivative Positions

4.76 Matching equity derivative positions with identical equity underlying position and matching positions in equity derivative contracts of identical underlying in each market may be fully offset, resulting in a single net short or long position to which the specific and general risk charges will apply. For example, a future in a given equity may be offset against an opposite physical position in the same equity⁸⁶. Similarly, a long and short position of identical equity futures for a particular contract month can be netted off.

Arbitrage

4.77 In the case of the futures-related arbitrage strategies described below, the additional 2% capital charge to reflect divergence and execution risks as described in Table 7 may be applied to only one index with the opposite position exempt from a capital charge. To qualify, Labuan banks must clearly identify that the trade has

⁸⁵ For example, an equity swap in which a banking institution is receiving an amount based on the change in value of one particular equity or stock index and paying a different index will be treated as a long position in the former and a short position in the latter. Where one of the legs involves receiving/paying a fixed or floating interest/profit rate, that exposure should be slotted into the appropriate repricing time band for interest/profit rate related instruments as set out in Part D.2.1 Interest/Profit Rate Risk. The stock index should be covered by the equity treatment.

⁸⁶ The interest/profit rate risk arising out of futures contract, however, should be reported as set out in **Part D.2.1 Interest/Profit Rate Risk**.

been deliberately entered into and separately controlled. The strategies may be in the form of:

- i. Labuan bank taking an opposite position in exactly the same index at different dates or in different market centres; and/or
- ii. Labuan bank having an opposite position in contracts at the same date in different but similar indices, subject to supervisory oversight that the two indices contain sufficient common components to justify offsetting.

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

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

However, in such cases, capital charge of 2% is applied on matching gross value of each side of the two positions. This applies even if all of the stocks comprising the index are held in identical proportions. Any excess value of the stocks comprising the basket over the value of the futures contract or excess value of the futures contract over the value of the basket is treated as an open long or short position. An example of how the equity arbitrage works is set out in Example 2.

4.79 If a Labuan bank takes a position in depository receipts against an opposite position in the underlying equity or identical equities in different markets, it may offset the position (that is bear no capital charge) but only on condition that any costs on conversion are fully taken into account.⁸⁷

⁸⁷ Any foreign exchange risk arising out of these positions has to be reported as set out in **Part D.2.3**

Example 2: Calculation of Equity Risk for Equity Arbitrage Strategies

Assume that a Labuan bank has the following equity arbitrage positions in its trading book:

1. Long five March 2008 Nikkei 225 Index Futures contracts at 16,000 **traded at SGX** (Singapore Exchange) and short five March 2008 Nikkei 225 Index Futures contracts at 16,500 **traded at OSE** (Osaka Securities Exchange). The positions are deliberately entered into and managed separately.

$$\begin{aligned}\text{Capital Charge} &= \text{Risk Charge for Arbitrage Strategies} \times \text{Number of} \\ &\quad \text{Contracts} \times \text{¥500 (per index point)} \times \text{Index of March} \\ &\quad \text{08 Nikkei 225 contract} \\ &= 2.0\% \times 5 \times \text{¥500} \times 16,500 \\ &= \text{¥825,000} \\ &= \textbf{USD7,260} \text{ (USD/¥: USD0.88 per ¥100)}\end{aligned}$$

Note: The foreign exchange rate risk is dealt with in accordance with the part on Foreign Exchange Rate Risk as at 1st December 2016.

2. Long five June 07 Kuala Lumpur Composite Index Futures (FKLI) contracts with index at 1000, and short five September 07 FKLI contracts. The positions are deliberately entered into and managed separately.

$$\begin{aligned}\text{Capital Charge} &= \text{Risk Charge for Arbitrage Strategies} \times \text{Number of} \\ &\quad \text{Contracts} \times \text{USD50 (per index point)} \times \text{Index of} \\ &\quad \text{June} \\ &\quad \text{07 contract} \\ &= 2.0\% \times 5 \times \text{USD50} \times 1000 \\ &= \textbf{USD5,000}\end{aligned}$$

3. Long a basket of KLCI equity worth USD1.1 million with weighted composition of 90% of the index broken down into notional components; and short ten June 07 FKL contracts worth USD1.0 million. The transactions are deliberate entered into and separately controlled.

Under this arbitrage strategy, there is an excess value (unmatched position) of USD100,000 over the value of the contracts. The excess value would be subjected to capital charge for both general and specific risks.

$$\begin{aligned}\text{Capital Charge} &= [(2\% \text{ of the gross value of basket of stocks and} \\ &\quad \text{futures contract}] + [\text{Unmatched Position} \times (\text{Specific} \\ &\quad \text{+ General Risk Charge})] \\ &= [(2.0\% \times \text{USD}2.1\text{million})] + [(\text{USD}100,000) \times \\ &\quad (8\%+8\%)] \\ &= \text{USD}42,000 + \text{USD}16,000 \\ &\quad \textbf{USD58,000}\end{aligned}$$

D.2.3 FOREIGN EXCHANGE RISK (INCLUDING GOLD AND SILVER POSITIONS)

- 4.80 This part sets out the minimum capital standard to cover the risk of holding or taking positions in foreign currencies⁸⁸ including gold and silver. Taking on foreign exchange positions may also expose a Labuan bank to interest/profit rate risk (for example, in forward foreign exchange contracts). In such a case, the relevant interest/profit rate positions should be included in the calculation of interest/profit rate risk described in Part D.2.1 Interest/Profit Rate Risks.
- 4.81 Under the standardised approach, two steps are needed to calculate the capital requirement for foreign exchange risk. The first is to measure the exposure in a single currency position (that is the net open position of a single currency). The second is to measure the risks inherent in a Labuan bank's mix of net long and

⁸⁸ Includes private commercial enterprise's FX trading activities where the Islamic banking operation has *mushārah* and/or *muḍārah* asset exposure.

short positions in different currencies (that is the total net long and total net short position in foreign currencies).

- 4.82 The capital charge will be 8% of the higher of the total net long or total net short foreign currency position. The respective net position in gold and silver is treated on a standalone basis and applied a capital charge of 8%.
- 4.83 Where there is physical trading of gold and silver, an additional capital charge of 3% is applied on the total gross long and short position respectively to account for execution risk.

The Treatment of Structural Positions

- 4.84 While matched foreign currency asset and liability positions will protect a Labuan bank against loss from movements in exchange rates, this will not necessarily protect its capital adequacy ratios. This is due to higher RWA for its foreign assets arising from appreciation of foreign exchange rate. By maintaining a *structural* net long position in the foreign currency, the gain arising from revaluation of the net long position will buffer the increase in RWA resulting from the rise in the value of foreign currency assets.
- 4.85 Any structural foreign currency positions which a Labuan bank has deliberately taken to hedge partially or totally against the adverse effect of the exchange rate on its capital adequacy ratios may be excluded from the calculation of net open currency positions, subject to the following conditions:
- i. the positions must be of non-dealing nature;
 - ii. the positions do no more than protect the Labuan bank's capital adequacy ratio; and
 - iii. the exclusion of the positions are approved by ALCO/Risk Committee, or other approving authority delegated by the board, and must be applied consistently throughout the life of the assets.

Measuring the Exposure in a Single Currency

4.86 Labuan bank's net open position in each currency (excluding gold and silver) should be calculated by aggregating the following positions:

- i. net on-balance sheet position⁸⁹ (that is all foreign currency asset items less all foreign currency liability items, for example currency and notes, trade bills, government and private debt papers, loans/financing and deposits, foreign currency accounts and accrued interest/income, denominated in the foreign currency in question)⁹⁰;
- ii. net forward position (that is present value of all amounts to be received less present value of all amounts to be paid under unsettled spot transactions, forward foreign exchange transactions, including currency futures, the principal on currency swaps position and interest/profit rate transactions such as futures, swaps etc denominated in a foreign currency)⁹¹;
- iii. guarantees and contingencies (exclude underwriting of equity IPOs which are captured as options and treated under Part D.2.5 Treatment of Options) that are certain to be called and are likely to be irrecoverable;
- iv. any other item representing a profit or loss in foreign currencies; and
- v. the net delta-based equivalent of the total book of foreign currency options⁹².

⁸⁹ Structural positions which fulfil conditions set out in Part D.2.3 Foreign Exchange Risk would be excluded from the computation.

⁹⁰ Interest/profit and other income accrued (that is earned but not yet received) should be included as a position. Accrued expenses should also be included.

⁹¹ Forward currency positions could be valued in the following ways:

(a) Present values of each forward foreign currency position using the interest/profit rate of the foreign currency and translated at current spot exchange rate; or
(b) Use forward exchange rates to translate the forward foreign currency leg; or
(c) Multiply the foreign currency forward leg by current spot exchange rate without present valuing. Treatments (a) and (b) are preferred. Nevertheless, treatment (c) which is a simplified but relatively inaccurate method may be used by banking institutions with small foreign exchange positions and do not possess the systems to conduct present value calculations.

⁹² Applicable to institutions which uses the Delta-plus method of treating options position. Subject to separately calculated capital charges for Gamma and Vega as described in **Part D.2.5 Treatment Of Options**; alternatively, options and their associated underlying may be subject to one of the other methods described in **Part D.2.5 Treatment Of Options**.

- 4.87 Currency pairs subject to a binding inter-governmental agreement linking the two currencies may be treated as one currency⁹³.
- 4.88 Positions in gold and silver are measured in terms of the standard unit of measurement which is then converted at reporting date spot exchange rate into USD⁹⁴.

The Treatment of Interest/Profit, Other Income and Expenses in Foreign Currency

- 4.89 Interest/profit accrued (that is earned but not yet received) should be included as a position. Accrued expenses should also be included. Unearned but expected future interest/profit and anticipated expenses may be excluded except when the amounts are certain and Labuan banks have taken the opportunity to hedge them. If Labuan banks include future income/expenses, the treatment should apply on a consistent basis, and not restricted to those expected future flows that would reduce position.

Measuring the Foreign Exchange Risk in a Portfolio of Foreign Currency Positions

- 4.90 The net position of the combined trading and banking book in each foreign currency is converted at spot rates (as at date of reporting) into the reporting currency. The overall net open position is measured by aggregating:
- i. the sum of the net short positions or the sum of the net long positions, whichever is the greater; with
 - ii. the net position (short or long) in gold and silver, regardless of whether it is positive or negative.
- 4.91 The capital charge will be 8% of the overall net open position (refer to the example below).

⁹³ For example, inter-governmental agreements apply to Singapore and Brunei dollars.

⁹⁴ Where gold/silver is part of a forward contract (the quantity of gold/silver to be received or to be delivered), any interest/profit rate or foreign currency exposure from the other leg of the contract should be reported as set out in **Part D.2.1 Interest/Profit Rate Risks**.

Example of the Standard Measure of Foreign Exchange Risk

	JPY	HKD	GBP	SGD	USD	GOLD
Step 1	+50	+100	+150	-20	-180	-35
Step 2	+300			-200		-35

The capital charge for foreign exchange risk would be 8 per cent of the higher of either the net long currency positions or the net short currency positions (300) and of the net position in gold (35) = $335 \times 8\% = 26.8$.

D.2.4 COMMODITIES RISK

4.92 This part establishes a minimum capital standard to cover the price risk of taking exposure in commodities⁹⁵, including precious metals, but excluding gold and silver (which are treated as a foreign currency according to the methodology set out in Part D.2.3 Foreign Exchange Risk. A commodity is defined as a physical product which is or traded on a secondary market, for example agricultural products, minerals (including oil) and precious metals.

4.93 The price risk in commodities is often more complex and volatile than that associated with currencies and interest/profit rates. Commodity markets may also be less liquid than those for interest/profit rates and currencies and, as a result, changes in supply and demand can have a more dramatic effect on price and volatility.⁹⁶ These market characteristics can make price transparency and the effective hedging of commodities risk more difficult.

4.94 Labuan banks involved in commodity derivatives are exposed to the following risks:

⁹⁵ All commodity derivatives and off-balance-sheet positions which are affected by changes in commodity prices should be included. This includes commodity risk arising from *Salam* contracts and private commercial enterprise's commodity trading activities where the Islamic banking operation has *mushārah* and/or *muḍārah* exposure.

⁹⁶ Labuan banks need also to guard against the risk that arises when the short position falls due before the long position. Owing to a shortage of liquidity in some markets it might be difficult to close the short position and the banking institution might be squeezed by the market.

- i. directional risk (the risk arising from a change in the spot price);
- ii. basis risk (the risk that the relationship between the prices of similar commodities alters through time);
- iii. interest/profit rate risk (the risk of a change in the cost of carry for forward positions and options); and
- iv. forward gap risk (the risk that the forward price may change for reasons other than a change in interest/profit rates).

In addition Labuan banks are exposed to counterparty credit risk on over-the-counter derivatives, but this is captured by the credit risk component of this framework. The funding of commodities positions may well expose a Labuan bank to interest/profit rate or foreign exchange risk and the relevant positions should be included in the measure of interest/profit rate and foreign exchange risk described in Part D.2.1 Interest/Profit Rate Risk and D.2.3 Foreign Exchange Risk.⁹⁷

- 4.95 Under the standardised approach, commodities risk is measured using either Simplified Approach or Maturity Ladder Approach. Both the Simplified Approach and the Maturity Ladder Approach are appropriate only for Labuan banks which, in relative terms, conduct only a limited amount of commodities business.
- 4.96 Under the Simplified Approach and the Maturity Ladder Approach, long and short positions in each commodity may be reported on a net basis⁹⁸ for the purposes of calculating open positions. Positions in different commodities will not be offsettable in this manner. However, the commodities can be considered as offsettable if they are *similar*⁹⁹ in nature and exhibit a minimum correlation of 0.9 between the price

⁹⁷ Where a commodity is part of a forward contract (quantity of commodities to be received or to be delivered), any interest/profit rate or foreign currency exposure from the other leg of the contract should be reported as set out in **Part D.2.1 Interest/Profit rate Risk** and **Part D.2.3 Foreign Exchange Risk (Including Gold and Silver Positions)**. Positions which are purely stock financing (that is a physical stock has been sold forward and the cost of funding has been locked in until the date of the forward sale) may be omitted from the commodities risk calculation although they will be subject to interest/profit rate and counterparty risk requirements.

⁹⁸ Labuan banks may exclude long and short positions in identical underlying commodities.

⁹⁹ For example, CBOT Mini-sized *Gold* vs. 100oz *gold*; but not Mini-sized *Silver* vs. Mini-sized *Gold*.

movements can be clearly established over a minimum period of one year. Labuan banks wishing to base its calculation of capital charges for commodities on correlations would have to satisfy Labuan FSA of the accuracy of the method which has been chosen and obtain its prior approval.

Simplified Approach

- 4.97 In calculating the capital charges for directional risk, Labuan banks must express each commodity position (spot plus forward) in terms of the standard unit of measurement (barrels, kilos, grams etc.). The net position in each commodity is then converted at current spot rates into USD. The capital charge will equal 15% of the net position, long or short, in each commodity.
- 4.98 In order to protect Labuan bank against basis risk, interest/profit rate risk and forward gap risk, the capital charge for each commodity will be subjected to an additional capital charge equivalent to 3% of the Labuan bank's gross positions, long plus short, in that particular commodity. In valuing the gross positions in commodity derivatives for this purpose, Labuan banks should use the current spot price.

Maturity Ladder Approach

- 4.99 In calculating the capital charge under this approach, Labuan banks must express each commodity position (spot plus forward) in terms of the standard unit of measurement (barrels, kilos, grams etc.). The net position in each commodity will then be converted at current spot rates into USD.
- 4.100 Subsequently, in order to capture forward gap and interest/profit rate risk within a time-band (which, together, are sometimes referred to as curvature/spread risk), matched long and short positions in each time- band will carry a capital charge. The methodology is similar to that used for interest/profit rate related instruments as set out in Part D.2.1 Interest/Profit Rate Risk. Positions in the separate commodities (expressed in terms of the standard unit of measurement) will first be entered into a maturity ladder while physical stocks should be allocated to the first

time-band. A separate maturity ladder will be used for each commodity as defined in paragraph 4.97.¹⁰⁰ For each time-band, the sum of short and long positions which are matched will be multiplied by the appropriated spread rate for that band (as set out in Table 8 below).

Table 8: Time-Bands and Spread Rates

Time-Band	Spread Rate
0-1 month	1.5%
> 1-3 months	1.5%
> 3-6 months	1.5%
> 6-12 months	1.5%
> 1-2 years	1.5%
> 2-3 years	1.5%
> 3 years	1.5%

4.101 The residual net positions from nearer time-bands may then be carried forward to offset exposures in time-bands that are further out. However, recognising that such hedging of positions among different time-bands is imprecise, a surcharge equal to 0.6% of the net position carried forward will be added in respect of each time-band that the net position is carried forward. The capital charge for each matched amount created by carrying forward net positions is calculated in accordance with paragraph 4.100. At the end of this process, Labuan bank would either be in long or only short positions, to which a capital charge of 15% is used to account for directional risk. An example of how the maturity ladder approach works is set out in Example 3.

4.102 All commodity derivatives and off-balance-sheet positions which are affected by changes in commodity prices fall under this measurement framework. This

¹⁰⁰ For markets which have daily delivery dates, any contracts maturing within ten days of one another may be offset.

includes commodity futures, commodity swaps, and options where the 'delta plus' method¹⁰¹ is used (see Part D.2.5 Treatment of Options). To calculate the risk, commodity derivatives should be converted into notional commodities positions and assigned to maturities as follows:

- i. futures and forward contracts relating to individual commodities should be incorporated in the measurement system as notional amounts of barrels, kilos etc. and should be assigned a maturity with reference to expiry date;
- ii. commodity swaps where one leg is a fixed price and the other the current market price should be incorporated as a series of positions equal to the notional amount of the contract, with one position corresponding with each payment on the swap and slotted into the maturity ladder accordingly. The positions would be long positions if the Labuan bank is paying fixed and receiving floating, and short positions if the Labuan bank is receiving fixed and paying floating;¹⁰² and
- iii. commodity swaps where the legs are in different commodities are incorporated in the relevant maturity ladder.

Models for Measuring Commodities Risk

4.103 Under the models approach Labuan banks may offset long and short positions in different commodities to a degree which is determined by empirical correlations, in the same way as a limited degree of offsetting is allowed, for instance, between interest/profit rates in different currencies.

Example 3: Maturity Ladder Approach for Commodities Risk

1. Assume all positions are in the same commodity as defined in paragraph 4.96 and converted at current spot rates into USD.

¹⁰¹ For banks using other approaches to measure options risk, all options and the associated underlyings should be excluded from both the maturity ladder approach and the simplified approach.

¹⁰² If one of the legs involves receiving/paying a fixed or floating interest/profit rate that exposure should be slotted into the appropriate repricing maturity band in the maturity ladder covering interest/profit rate related instruments.

Table B

Time Band	Position (USD)	Spread Rate	Capital Calculation	USD
0-1 month		1.5%		
> 1-3 months		1.5%		
> 3-6 months	Long 800 Short 1000	1.5%	800 long + 800 short (matched) x 1.5% =	24
			200 short carried forward to 1-2 years, capital charge: 200 x 2 x 0.6% =	2.4
> 6-12 months		1.5%	*	
> 1-2 years	Long 600	1.5%	200 long + 200 short (matched) x 1.5% =	6
			400 long carried forward to over 3 years, capital charge: 400 x 2 x 0.6% =	4.8
> 2-3 years		1.5%	*	
> 3 years	Short 600	1.5%	400 long + 400 short (matched) x 1.5% =	12
			Net position: 200, Capital charge: 200 x 15% =	30
Total Capital Charge				79.2

- The net position in the previous bucket is carried forward to the next bucket since no offset could be done in this bucket.

2. Assume all positions are in crude palm oil (CPO):
 - i. A short position in forward contract of 15,000 tonne of CPO maturing in six months' time.

- ii. Swap position on 10,000 tonne notional amount of CPO, the Labuan bank receives spot price and pays fixed price. The next payment date occurs in 2 months' time (quarterly settlement) with residual life of 11 months.

First Step

Convert the positions at current spot rates (assuming current spot rate is USD2,500 per tonne).

- (a) 15,000 tonne X USD2,500 = USD37.5 million
(b) 10,000 tonne X USD2,500 = USD25.0 million

Second Step

Slot the position in USD into the maturity ladder accordingly:

- (a) Forward contract in "3-6 months" time-band as short position.
- (b) Swap position in several time-bands reflecting series of positions equal to notional amount of the contract. Since the Labuan bank is paying fixed and receiving spot, the position would be reported as a long position. The payments occur (and is slotted accordingly in the respective time-bands) as follows:
- First Payment : month 2 (next payment date)
 - Second Payment : month 5
 - Third Payment : month 8
 - Final payment : month 11 (end of life of the swap)

Table C

Time Band	Position (USD '000)	Spread Rate	Capital Calculation	USD '000
0-1 month		1.5%		
1-3 months	Long 25,000	1.5%	25,000 long carried forward to '1-3 months', capital charge: $25,000 \times 0.6\% =$	1,500
3-6 months	Long 25,000 Short 37,500	1.5%	37,500 long + 37,500 short (matched) $\times 1.5\% =$ Balance of 12,500, capital charge: $12,500 \times 15\% =$	1,125 1,875
6-12 months	Long 25,000 Long 25,000	1.5%	Capital charge: $50,000 \times 15\% =$	7,500
Total Capital Charge				12,000

D.2.5 TREATMENT OF OPTIONS

4.104 Options risks derived from Labuan bank's underwriting business shall be subjected to options treatment under the Underlying Positions Approach as detailed in this Part. Under this approach, underwriting of equity and debt activities are subjected to separate capital charges that incorporate both specific and general risk. The capital charge numbers are then added to the capital charges of other risk categories.

4.105 For activities involving options other than underwriting, there are four approaches available for measuring options related risks namely; the simplified, delta-plus, scenario and internal models approaches. Labuan banks which are exposed to a limited range of purchased options are allowed to use the simplified approach. Labuan banks which also write options will be expected to use either the delta-plus approach or scenario approach. The use of internal model approaches would require Labuan banks to obtain prior approval from Labuan FSA. Labuan banks with significant options trading activities will be expected to use a more sophisticated approach.

Underlying Position Approach

4.106 Labuan banks whose option risk is from underwriting of equity IPO, rights issues and debt securities/*sukūk*, may use the underlying position approach to estimate the required capital charge for these transactions on a trade-by-trade basis, as described below:

Table 9: Underlying Position Approach: Capital Charges

Position	Treatment
Underwriting of equity type instrument; IPO and rights issue	The capital charge will be the amount of equity in the underwriting agreement which the Labuan bank is committed to underwrite ¹⁰³ multiplied by the sum of specific risk and general risk weights as defined in Table 7 of Part D.2.2 Equity Position Risk . The resultant amount is then multiplied by 50%, the conversion factor which estimates the pick-up probability. The recognition period for the underwriting equity risk begins from the date when the underwriting agreement is signed until the date of issuance. Equity positions held post-issuance date would be treated as per Part D.2.2 Equity Position Risk .
Underwriting of debt instruments/ <i>sukūk</i>	The amount of debt/ <i>sukūk</i> to be raised in the underwriting agreement in which the Labuan bank is committed to underwrite ¹⁰³ , multiplied by 50%, the conversion factor which estimates the pick-up probability. The resultant figure will be incorporated into Part D.2.1 Interest/Profit Rate Risk to calculate the capital charge for general risk. For specific risk charge, the same resultant figure is multiplied by the specific risk charge stipulated in Table 2 in Part D.2.1 Interest/Profit Rate Risk of the framework. The recognition period for the underwriting of debt instruments/ <i>sukūk</i> begins from the date when the underwriting agreement is signed until the date of issuance ¹⁰⁴ . Debt/ <i>sukūk</i> positions held post-issuance date would be treated as per Interest/Profit Rate Risk described in Part D.2.1

¹⁰³ Underwriting commitments can be netted off against sell down (back-to-back) arrangements established with unrelated parties, where the arrangement is unconditional, legally binding and irrevocable, and where the banking institution has no residual obligation to pick up the purported sell down portion.

¹⁰⁴ In most cases of underwriting of short-term debt/*sukūk* such as commercial papers, given that the returns are usually based on cost of funds/expected returns to investors plus a spread, where the cost of funds/expected returns to investors is determined one or two days before issuance, the real exposure to the institutions arising from the underwriting agreement is more of the credit risk of the issuer rather

- 4.107 To illustrate how the calculation would work in the case of underwriting equities, assume an institution underwrites USD2 million in shares of a non KLCI equity at issue price of USD2.00 each. The capital charge for a non KLCI equity is 22% (that is 14% for specific risk and 8% for general risk). The capital charge would amount to USD220,000 (USD2 million x 22% x 50%).

Simplified Approach

- 4.108 Only Labuan banks which handle a limited range of purchased options are allowed to use the simplified approach set out in Table 10 for particular trades. As an example of how the calculation would work, if a holder of 100 KLCI shares currently valued at USD10 each holds an equivalent put option with a strike price of USD11, the capital charge would be: USD1,000 x 16% (that is 8% specific plus 8% general market risk) = USD160, less the amount the option is in the money (USD11 - USD10) x 100 = USD100, that is the capital charge would be USD60. A similar methodology applies for options whose underlying is a foreign currency, an interest rate related instrument or a commodity.

than an interest/profit rate fluctuation risk. As such, for specific risk, the recognition period for underwriting of commercial papers/short term debts papers/*sukūk* begins from the date when the underwriting agreement is signed until the date of issuance whilst for general risk, the recognition period for underwriting of commercial papers/short term debts/*sukūk* begins from the date a rate is fixed (for example, *sukūk murabahah*) until the date of issuance. In the event that market practice changes or in the case of underwriting of debt instruments which assumes characteristics of interest/profit rate options, these positions should be reflected accordingly. An illustration on the treatment for such underwriting exposures is provided in **Appendix XVIII**.

Table 10: Simplified Approach: Capital Charges

Position	Treatment
Long cash and Long put Or Short cash and Long call	The capital charge will be the market value of the underlying security ¹⁰⁵ multiplied by the sum of specific and general market risk charges ¹⁰⁶ for the underlying less the amount the option is in the money (if any) bounded at zero ¹⁰⁷
Long call Or Long put	The capital charges will be the lesser of: (i) The market value of the underlying security multiplied by the sum of specific and general market risk charges ⁹⁶ for the underlying; or (ii) The market value of the option ¹⁰⁸

Delta-Plus Method

4.109 Labuan banks which write options may be allowed to include delta-weighted option positions within the standard method set out in Part D.2¹⁰⁹. Such options should be reported as a position equal to the sum of the market values of the underlying multiplied by the sum of the values of the deltas. However, since delta does not cover all risks associated with option positions, Labuan banks are also required to measure Gamma (which measures the rate of change of delta) and

¹⁰⁵ In some cases such as foreign exchange, it may be unclear which side is the 'underlying security'; this should be taken to be the asset which would be received if the option were exercised. In addition the nominal value should be used for items where the market value of the underlying instrument could be zero, for example, caps and floors, swaptions etc.

¹⁰⁶ Some options (for example, where the underlying is an interest/profit rate, a currency or a commodity) bear no specific risk but specific risk will be present in the case of options on certain interest/profit rate related instruments (e.g. options on a corporate debt security or corporate bond index; see **Table 2, Part D.2.1 Interest/Profit Rate Risk** for the relevant capital charges) and for options on equities and stock indices (see **Table 7, Part D 2.2 Equity Position Risk**). The charge under this measure for currency options will be 8% and for options on commodities 15%.

¹⁰⁷ For options with a residual maturity of more than six months the strike price should be compared with the forward, not current, price. A bank unable to do this must take the in the money amount to be zero.

¹⁰⁸ Where the position does not fall within the trading book (that is options on certain foreign exchange or commodities positions not belonging to the trading book), it may be acceptable to use the book value instead.

¹⁰⁹ Delta measures the sensitivity of an option's value to a change in the price of the underlying asset.

Vega (which measures the sensitivity of the value of an option with respect to a change in volatility) in order to calculate the total capital charge.

- 4.110 Delta-weighted positions with debt securities/*sukūk* or interest/profit rates as the underlying will be slotted into the interest rate time bands, as set out in **Part D.2.1 Interest/Profit Rate Risk**. Similar to other derivative transactions, a two-legged approach is used, which requires one entry at the time the underlying contract takes effect and a second entry, at the time the underlying contract matures. For instance, a bought call option on a June three month interest rate future will in April be considered, on the basis of its delta-equivalent value, a long position with a maturity of five months and a short position with a maturity of two months¹¹⁰. The written option will be similarly slotted as a long position with a maturity of two months and a short position with a maturity of five months. Floating-rate instruments with caps or floors will be treated as a combination of floating-rate securities and a series of European-style options. For example, the holder of a three-year floating-rate bond indexed to 6-month KLIBOR with a cap of 15% will be treated as:
- i. a debt security that reprices in six months; and
 - ii. a series of five written call options on a FRA with a reference rate of 15%, each with a negative sign at the time the underlying FRA takes effect and a positive sign at the time the underlying FRA matures.
- 4.111 The capital charge for options with equities as the underlying assets are based on the delta-weighted positions which will incorporate the measure of market risk described in Part D.2.2 Equity Position Risk.
- 4.112 The capital charge for options on foreign exchange is based on the delta-weighted position which will incorporate measurement of the exposure for the respective currency position as described in Part D.2.3 Foreign Exchange Risk.

¹¹⁰ A two month call option on a bond future where delivery of the bond takes place in September would be considered in April as being a long position in the bond and a short position in the five months deposit, both positions being delta-weighted.

- 4.113 The capital charge for options on commodities is based on simplified or the maturity ladder approach set out in D.2.4 Commodities Risk. The delta-weighted positions will be incorporated in one of the measures described under that part.
- 4.114 In addition to the above capital charge arising from delta risk, there will be further capital charges for Gamma and for Vega risk. Labuan banks using the delta-plus method will be required to calculate the Gamma and Vega for each option position separately.
- 4.115 The capital charges for Gamma risk should be calculated in the following way:

$$\text{Gamma impact} = 1/2 \times \text{Gamma} \times (\text{VU})^2$$

where VU denotes the variation in the price of the underlying of the option.

VU will be calculated as follows:

- i. for interest/profit rate options, the market value of the underlying should be multiplied by the risk weights set out in **Table 3 of D.2.1 Interest/Profit Rate Risk**;
- ii. for options on equities and equity indices, the market value of the underlying should be multiplied by the equity general risk charge set out in **Table 7 of Part D.2.2 Equity Position Risk**;
- iii. for options on foreign exchange, the market value of the underlying multiplied by 8%; and
- iv. for options on commodities, the market value of the underlying should be multiplied by 15%.

- 4.116 For the purpose of calculating the Gamma impact the following should be treated as the same underlying:
- i. interest/profit rates¹¹¹, each time band as set out in Table 3 of Part D.2.1 Interest/Profit Rate Risk;
 - ii. equities and stock indices, each national market; and
 - iii. foreign currencies, each currency pair.
 - iv. commodities, each individual commodities.
- 4.117 Each option on the same underlying will have a Gamma impact that is either positive or negative. These individual Gamma impacts are aggregated, resulting in a net Gamma impact for each underlying which is either positive or negative. Only net Gamma impacts that are negative will be included in the capital calculation.
- 4.118 The total Gamma capital charge will be the sum of the absolute value of the net negative Gamma impacts as calculated above.
- 4.119 To calculate *Vega risk*, Labuan banks must multiply the Vega for each option by a 25% proportional shift of the option's current volatility. The results are then summed across each underlying. The total capital charge for Vega risk is calculated as the sum of the absolute value of Vega across each underlying.
- 4.120 An illustration of the use of the Delta-plus method is provided in Example 4.

Scenario Approach

- 4.121 Labuan banks will also have the right to base the market risk capital charge for options portfolios and associated hedging positions using the *scenario matrix analysis*. This will be accomplished by specifying a fixed range of changes in the option portfolio's risk factors (that is underlying price/rate and volatility) and calculating changes in the value of the option portfolio and its associated hedging

¹¹¹ Positions have to be slotted into separate maturity ladders by currency.

positions at various points along this matrix. To calculate the capital charge, Labuan bank has to revalue the option portfolio using matrices for simultaneous changes in the option's underlying rate or price and in the volatility of that rate or price. A different matrix will be set up for each individual underlying position. In the case of interest/profit rate options, an alternative method is permitted for Labuan banks to base the calculation on a minimum of six sets of time bands. When using this method, not more than three of the time bands (as defined in Table 5, Part D.2.1 Interest/Profit Rate Risk) should be combined into any one set.

- 4.122 The options and related hedging positions will be evaluated over a specified range above and below the current value of the underlying – this defines the first dimension of the matrix. The range for changes in interest/profit rates is consistent with the assumed changes in yield in Table 5 of Part D.2.1 Interest/Profit Rate Risk. Labuan banks using the alternative method for interest/profit rate options set out in the previous paragraph should use, for each set of the time bands, the highest of the assumed changes in yield, applicable to the group to which the time bands belong¹¹². The other ranges are the equity general risk charge stipulated in Table 7 for equities, and $\pm 8\%$ for foreign exchange, gold and silver, and $\pm 15\%$ for commodities. For all risk categories, at least seven price shifts (including the current observation) should be used to divide the range into equally spaced intervals.
- 4.123 The second dimension of the matrix entails a change in the volatility of the underlying rate or price. A single change in the volatility of the underlying rate or price equal to a proportional shift in volatility of $\pm 25\%$ is expected to be sufficient in most cases. As circumstances warrant, however, Labuan FSA may require that a different change in volatility be used and/or that intermediate points on the matrix be calculated.

¹¹² If, for example, in the case of options involving G10 currency interest/profit rate risk, where the time bands “> 3 to 4” years, “> 4 to 5” years and “> 5 to 7” years are combined, the highest assumed change in yield of these three bands would be 0.75 percentage point.

- 4.124 After calculating the matrix, each cell should contain the net profit or loss of the option and the underlying hedge instrument. The capital charge for each underlying will then be calculated as the largest loss contained in the matrix.
- 4.125 The application of the scenario method by any specific Labuan bank will be subjected to supervisory consent, particularly with regard to the precise way that the analysis is constructed.
- 4.126 An illustration of the use of the Scenario Approach is provided in Example 5.

Example 4: Delta-Plus Methods for Options

A. A Single Stock Option

1. Assume a Labuan bank has a European short call option to sell 1000 units of a KLCI stock with an exercise price of USD45 and a market value (spot price) of the underlying 12 months from the expiration of the option at USD50; a risk-free interest rate at 8% per annum, and volatility at 20%. The current unit delta for this position is according to the Black-Scholes formula - 0.848 (that is the price of the option changes by -0.848 if the price of the underlying moves by USD1). The unit Gamma is -0.0235 (that is the delta changes by -0.0235, from -0.848 to -0.872, if the price of the underlying moves by USD1). The Gamma is $(-0.0235 \times 1,000) = -23.55$. The current value of the option is $\text{USD}9.328 \times 1,000 = \text{USD}9,328$.
2. The market risk capital charge for the single stock option is the summation of:
 - i. Specific Risk and General Risk on delta-weighted position incorporated in Part D.2.2 Equity Position Risk; and
 - ii. Gamma and Vega risks charge provided under Part D.2.5 Treatment of Options.

Specific Risk and General Risk on delta-weighted position of equity options which will be incorporated in Part D.2.2 Equity Position Risk

3. To compute the specific risk and general risk on delta-weighted position of the stock option position, the following steps should be taken:

- a) The first step under the delta-plus method is to calculate the delta-weighted option position. This is accomplished by multiplying the market value of 1 unit of underlying or spot price, the number of units to be sold and the value of the delta

$$50 \times 1,000 \times (-0.848) = -\text{USD}42,400.$$

The delta-weighted position then has to be incorporated into the framework described in Part D.2.2 Equity Position Risk.

- b) The specific risk for the stock option will be the multiplication of the delta-weighted position and the specific risk weight of the underlying equity (KLIC stock specific risk weight = 8%, refer to Table 7 of Part D.2.2 Equity Position Risk). Hence, the capital charge for specific risk will be:

$$-\text{USD}42,400 \times 0.08 = \text{USD}3,392$$

- c) The delta risk charge will be calculated by incorporating the delta-weighted option position together with the other net equity positions generated in Part D.2.2 Equity Position Risk. Assuming that no other positions exist, the delta risk of the stock option is calculated as the multiplication of the delta-weighted position and the 8% general risk weight accorded to equities. Hence, the capital charge for general risk is calculated as:

$$-\text{USD}42,400 \times 0.08 = \text{USD}3,392$$

The total capital charge for specific risk and general risk on delta-weighted position which should be reflected in Part D.2.2 Equity Position Risk will be: USD6,784 (that is 3,392 + 3,392).

Gamma and Vega Risks carved out to be provided under Part D.2.5 Treatment of Options

4. Under the delta-plus method, the capital charges for Gamma and Vega risk will be calculated as follows:

- a) The capital charge for Gamma, only negative gamma impact should be included and has to be calculated according to the formula set out in paragraph 4.115 in **Part D.2.5 Treatment of Options**:

$$1/2 \times \text{Gamma} \times (\text{market value of 1 unit of the underlying or spot price} \times 0.08)^2$$

$$1/2 \times (23.55) \times (50 \times 0.08)^2 = \text{USD188}$$

- b) The capital charge for Vega has to be calculated separately. The assumed current (implied) volatility is 20%. As an increase in volatility carries a risk of loss for a short call option, the volatility has to be increased by a relative shift of 25%. This means that the Vega capital charge has to be calculated on the basis of a change in volatility of 5 percentage points from 20% to 25% in this example. According to the Black-Scholes formula used here, the unit Vega equals 11.77. Thus a 1% or 0.01 increase in volatility increases the value of the option by 0.1177. Accordingly, a change in volatility of 5 percentage points would increase the value by:

$$5 \times 0.1177 \times 1,000 = \text{USD589}$$

which is the capital charge for Vega risk.

The total capital charge for Gamma and Vega risk which should be disclosed in **Part D.2.5 Treatment of Options** under the Delta-plus method will be **USD777** (that is 188 + 589).

5. The total market risk capital charge for 1,000 units of a single stock call option sold, with the stock price of USD50, is USD7,561 (that is 6,784 + 777).

B. A portfolio of Foreign Exchange Options

6. Assume a Labuan bank has a portfolio of options with the following characteristics:

Option	Currency Pair	Nominal amount	Market Value of 1 unit of Underlying (Spot Price)	Market Value of 1 unit of Underlying (RM)	Market Value of Underlying (RM)
1	USD/RM	USD100,000	3.132	RM3.132	313,200
2	USD/RM	USD600,000	3.132	RM3.132	1,879,200
3	USD/RM	USD200,000	3.132	RM3.132	626,400
4	USD/RM	USD300,000	3.132	RM3.132	939,600
5	GBP/JPY	GBP100,000	131.806	GBP1 = JPY131.806 * 0.0374586968 = RM4.937	493,700
6	GBP/JPY	GBP50,000	131.806	RM4.937	246,850
7	GBP/JPY	GBP75,000	131.806	RM4.937	370,275

Option	Currency Pair	Market Value of Underlying (RM)	Unit Delta	Unit Gamma	Gamma (RM)	Unit Vega	Assumed Volatility (%)
1	USD/RM	313,200	-0.803	0.0018	564	1.84	5
2	USD/RM	1,879,200	-0.519	-0.0045	-8,456	-3.87	20
3	USD/RM	626,400	0.182	-0.0049	-3,069	-0.31	20
4	USD/RM	939,600	0.375	0.0061	5,732	-4.97	10
5	GBP/JPY	493,700	-0.425	0.0065	3,209	5.21	10
6	GBP/JPY	246,850	0.639	-0.0016	-395	-4.16	7
7	GBP/JPY	370,275	0.912	0.0068	2,518	3.15	5

7. The market risk capital charge for the portfolio of foreign exchange options is the summation of:
 - i. General Risk on delta-weighted position incorporated in **Part D.2.3 Foreign Exchange Risk**; and
 - ii. Gamma and Vega risks charge provided under **Part D.2.5 Treatment of Options**.

General Risk on delta-weighted position of currency options which will be incorporated in Part D.2.3 Foreign Exchange Risk

8. To compute the general risk on delta-weighted position of the foreign exchange option portfolio, the following steps should be taken:
 - a) The first step under the delta-plus method is to calculate the delta- weighted option position. This is accomplished by multiplying the value of each option's delta by the market value of the underlying currency position (see **Table C**, column 3). This leads to the following net delta- weighted position in each currency:

Table C

Option	Currency Pair	Delta × Market Value of Underlying
1	USD/RM	-251,500
2	USD/RM	-975,305
3	USD/RM	114,005
4	USD/RM	352,350
5	GBP/JPY	-209,823
6	GBP/JPY	157,737
7	GBP/JPY	337,691

- b) Assuming that the Labuan bank holds no other foreign currency positions, inclusion of these positions into the framework set out in Part A.3 Foreign

Exchange Risk yields a net open delta-weighted position of 1,046,055 (the larger of either the sum of the net short positions or the sum of the net long positions across currency pairs) and a capital charge of **USD83,684** ($1,046,055 \times 0.08$).

GBP	USD	JPY
+ 285,605	- 760,450	- 285,605
+ 285,605.45	- 1,046,055	

Hence, the capital charge for general risk on delta-weighted position of the foreign exchange option which should be reflected in **Part D.2.3 Foreign Exchange Risk** will be **USD83,684**.

Gamma and Vega Risks carved out to be provided under Part D.2.5 Treatment of Options

9. Under the delta-plus method, the capital charges for Gamma and Vega risk will be calculated as follows:

- a) The Gamma impact (see **Table D**, column 3) for each option is calculated as:

$$1/2 \times \text{Gamma (RM)} \times (\text{market value of 1 unit of underlying (RM)} \times 0.08)^2$$

For each underlying, in this case currency pair, a net Gamma impact is obtained:

USD/RM	-164.18
GBP/JPY	+415.92

Only the negative Gamma impacts are included in the capital calculation, hence the Gamma charge here is **USD164**.

Table D

Option	Currency Pair	Gamma Impact (RM)	Net Gamma Impact (RM)
1	USD/RM	17.70	-164.18
2	USD/RM	-265.45	
3	USD/RM	-96.35	
4	USD/RM	179.91	
5	GBP/JPY	250.32	+4 15.92
6	GBP/JPY	-30.81	
7	GBP/JPY	196.41	

- b) The Vega capital charge is based on the assumed implied volatilities for each option which are shown in Table E column 3. The 25 per cent volatility shifts are shown in Table E column 5. Multiplying these shifts with each option's Vega and the market value of underlying, yields the assumed price changes (shown in Table E column 6). These are then summed up for each currency pair. The net Vega impact for each currency pair is:

USD/RM	-27,757.35
GBP/JPY	+33,895.59

Since no netting of Vegas is permitted across currency pairs, the capital charge is calculated as the sum of the absolute values obtained for each currency pair: $27,757 + 33,896 = \text{USD}61,653$

Table E

Option	Currency Pair	Assumed Volatility (%)	Vega	Volatility Shift (Percentage Points)	Change in Value (RM)	Net Vega Impact (RM)
1	USD/RM	5	1.84	1.25	7,203.60	-27,757.35
2	USD/RM	20	-3.87	5.00	-90,906.30	
3	USD/RM	20	-0.31	5.00	-2,427.30	
4	USD/RM	10	4.97	2.50	58,372.65	
5	GBP/JPY	10	5.21	2.50	32,152.21	+33,895.59
6	GBP/JPY	7	-4.16	1.75	-12,836.20	
7	GBP/JPY	5	3.15	1.75	14,579.58	

The total capital charge for Gamma and Vega risk arising from the options portfolio which should be disclosed in Part D.2.5 Treatment of Options under the Delta-plus method is USD61,817 (that is 164 + 61,653).

10. The total market risk capital charge for the portfolio of foreign currency options is USD145,501 (that is 83,684 + 61,817).

Example 5: The Scenario Approach for Options

1. Consider a Labuan bank n holding a portfolio of two KLCI equities and two options on the same equities as set out below:

Equity

		No of Shares	Current Price (USD)
Long	ABC	100	19.09
Short	XYZ	-50	1.79

Option

	No. of Shares	Option Type	Delta	Time to Expiry (yrs)	Strike Price (RM)	Current Volatility (%)
Long ABC	50	Call	0.43	0.45	20.00	15.0
Short XYZ	20	Put	-0.76	0.36	2.25	42.0

(Assumed risk free rate: 5%)

2. The market risk capital charge for the portfolio is the summation of the:
 - i) Specific Risk of the equities and delta-weighted positions of underlying equities. This specific risk is incorporated in Part D.2.2 Equity Position Risk of the framework; and
 - ii) General Risk of the portfolio, which is carved out and subjected to Scenario Approach in Part D.2.5 Treatment of Options of the framework.

Specific Risk of the equities and delta-weighted positions of the underlying equities to be incorporated in Part D.2.2 Equity Position Risk

3. To compute the specific risk for the equities and equity options, the following steps should be taken:
 - a) Calculate the delta-weighted positions of the underlying equities – the delta weighted option is calculated by multiplying the value of each option's delta by the market value of the underlying equity (see Table F, column 2). This leads to the following net delta-weighted position in each equity:

Table F

Options Position	Delta × Market Value of Underlying (USD)	Number of Shares	Total Position (USD)
Option on ABC	8.115	50	405.75
Option on XYZ	-1.363	20	-27.25

Equity Position	Market Value (USD)	Number of Shares	Total Position (USD)
ABC	19.09	100	1,909.00
XYZ	1.79	- 50	-89.50

Assuming that the Labuan bank does not hold other equity positions, the delta weighted positions of the options will be added to the respective value of equities (ABC and XYZ) held. The net position for each equity will be incorporated in Part D.2.2 Equity Position Risk of this framework and the values are as follows:

$$\text{ABC} = + 2,314.75 \quad [405.75 + 1,909.00]$$

$$\text{XYZ} = - 116.75 \quad [-27.25 - 89.50]$$

- b) Calculate the specific risk charge by multiplying the specific risk weight of the equities as listed in Table 7 of Part D.2.2 Equity Position Risk. In this example, the specific risk weight is 8% for KLCI equities. Hence, the total capital charge for specific risk to be reflected in Part D.2.2 Equity Position Risk will be USD194.52 $[(2,314.75 \times 0.08) + (116.75 \times 0.08)]$.

General Risk is carved out and be subjected to the Scenario Approach in Part D.2.5
Treatment of Options

4. To compute the general risk under the Scenario Approach, the following procedures are taken:

- a) Apply the price movements over the range $\pm 8\%$ to the equity positions. The change in portfolio values is shown below:

Change in Value of Equity Positions

	Assumed Price Change (%)						
	-8.00	-5.33	-2.67	0.00	2.67	5.33	8.00
ABC	-152.72	-101.81	-50.91	0.00	50.97	101.74	152.72
XYZ	7.16	4.77	2.39	0.00	-2.39	-4.77	-7.16

- b) Apply the matrix of price and volatility movements to the ABC call options and the changes in the value of the options are shown below:

ABC Options - Change in Value

Assumed Volatility Change (%)	Assumed Price Change (%)						
	-8.00	-5.33	-2.67	0.00	2.67	5.33	8.00
+25	-15.57	-9.21	-0.92	9.46	21.98	36.58	53.15
0	-21.46	-16.58	-9.53	0.00	12.17	26.95	44.15
-25	-25.82	-22.84	-17.58	-9.32	2.36	17.51	35.78

- c) Holding of XYZ put options will be subjected to the same treatment as per (b) above and the changes in the value of the options are shown below.

XYZ Options - Change in Value

Assumed Volatility Change (%)	Assumed Price Change (%)						
	-8.00	-5.33	-2.67	0.00	2.67	5.33	8.00
+25	+2.82	+2.20	+1.46	+0.75	+0.07	-0.58	-1.08
0	+2.26	+1.59	+0.78	0.00	-0.74	-1.45	-1.99
-25	+1.87	+1.13	+0.24	-0.63	-1.45	-2.24	-2.84

- d) Summing the changes in the value for ABC and XYZ equities and the equity options to arrive at the contingent loss matrix for the total portfolio as shown below:

Total Portfolio - Change in Value

Assumed Volatility Change (%)	Assumed Price Change (%)						
	-8.00	-5.33	-2.67	0.00	2.67	5.33	8.00
+25	-158.31	-104.05	-47.98	10.21	70.56	133.04	197.63
0	-164.76	-112.03	-57.27	0.00	59.95	122.54	187.72
-25	-169.52	-118.75	-65.86	-9.95	49.43	112.30	178.50

The general risk capital charge for the portfolio will be the largest loss arising from changes in the price of the equities and volatility of the options as shown in the matrix above - in this case is 169.52. This capital charge will be reflected in Part D.2.5 Treatment of Option under the Scenario approach.

- The total market risk capital charge for the portfolio is 364.04 (that is 169.52+194.52).

PART E LARGE EXPOSURE RISK REQUIREMENTS

E.1 LERR FOR LABUAN BANKS

- 5.1 A Labuan bank shall compute its Large Exposure Risk Requirement (LERR) in relation to its holding of equities (excluding the holdings of units of unit trust funds).
- 5.2 The LERR for a single equity capital charge shall be applied at all times on an exposure to a single equity that is greater than either the lower of 15% of the Labuan bank's Total Capital or 10% of the issuer's paid-up capital. For equity positions held in the trading book, the capital charge is determined by multiplying the market value of the equity position in excess of the threshold, with the sum of the corresponding general and specific risk weights outlined in the market risk component of the Guidelines. For positions held in the banking book, the capital charge is determined by multiplying the value in excess of the threshold with the corresponding risk weight (i.e. 100%). For trading book exposures, the LERR capital charge shall be multiplied by a factor of 12.5 to arrive at a risk- weighted asset equivalent. An illustration for the calculation of LERR is given in **Appendix XIV**.
- 5.3 Shares and interest-in-shares that are acquired as a result of underwriting commitments, debt satisfaction and debt-equity conversions shall be subject to the LERR capital charge only if the shares and interest-in-shares remain with the Labuan bank after 12 months from the date of acquisition or conversion.

PART F SECURITISATION FRAMEWORK

F.1 INTRODUCTION

6.1 The Securitisation Framework outlines:

- i. the approaches in determining regulatory capital requirements on exposures arising from traditional and synthetic securitisations¹¹³ held in the banking book; and
- ii. the operational requirements for allowing regulatory capital relief for originating banking institutions.

6.2 Under the Securitisation Framework, all Labuan banks, whether acting as originators or as third-party investors, must hold regulatory capital against all securitisation exposures (on- or off-balance sheet) in the banking book¹¹⁴ arising from traditional and synthetic securitisations or structures that contain features similar to both¹¹⁵, hereinafter referred to as 'securitisation exposures'. Such securitisation exposures may arise from a Labuan bank's:

- i. investments in any securitisation issue, including retention or repurchase of one or more securitisation positions;
- ii. provision of credit risk mitigants or credit enhancement to parties to securitisation transactions;
- iii. provision of liquidity facilities or other similar facilities;
- iv. obligations due to early amortisation features in a securitisation; or
- v. entitlements to future income generated by a securitisation through various

¹¹³ Or similar structures that contain features common to both, including Islamic securitisations. Pending the development of a framework for Islamic securitisation transactions, this Securitisation Framework will similarly apply to Shariah-compliant securitisation exposures, where applicable.

¹¹⁴ Securitisation exposures held in the trading book are subject to interest/profit rate risk charges (specific and general risks) as outlined in the market risk component of the Guidelines on Risk Weighted Assets.

¹¹⁵ For example, a collateralised debt obligation (CDO) that includes a credit-linked note issued out of another synthetic securitisation transaction is considered a structure which contains features of both traditional and synthetic securitisations.

forms of arrangements such as deferred purchase price, excess servicing income, gain-on-sale, future margin income, cash collateral accounts or other similar arrangements.

- 6.3 The Securitisation Framework outlines the approach for Labuan banks adopting the Standardised Approach for credit risk (Part F.3)
- 6.4 As securitisations may be structured in different ways, capital treatments should be applied based on the economic substance or actual risk profile of a particular securitisation exposure rather than the legal form. This ensures that capital provided is commensurate with the underlying risk borne by Labuan banks. The capital treatment under the Securitisation Framework shall apply to both conventional securitisation exposure and asset-backed sukuk held by Labuan banks. For exposures where the economic substance or actual risk profile of a transaction is akin to a corporate exposure or exposures to asset-based sukuk, the capital treatment under the Standardised Approach for credit risk (Part B.2) shall apply. Definitions and general descriptions of terms used in the Securitisation Framework are provided in **Appendix XVI**.
- 6.5 Where there are doubts about the appropriate treatment of a particular exposure for regulatory capital purposes, Labuan banks should consult Labuan FSA. For complex securitisation products such as CDO² and single-tranche CDO, where the capital treatment under this framework may not be appropriate, Labuan FSA may specify a separate treatment on a case-by-case basis.
- 6.6 In entering into any securitisation transactions, Labuan banks are also expected to comply with the expectations set out in other applicable regulatory requirements and guidelines as prescribed by Labuan FSA.

F.2 OPERATIONAL REQUIREMENTS FOR CAPITAL RELIEF

- 6.7 Under the Securitisation Framework, regulatory capital relief is granted based on the assessment of whether risks under a securitisation transaction have been effectively and significantly transferred. The extent to which securitisation exposures are retained through arrangements during the life of the transaction such as the provision of unconditional liquidity facilities will also be considered. The operational requirements for such capital relief are detailed in paragraphs 6.10 and 6.11. An originating banking institution may, upon receiving written approval for capital relief from Labuan FSA, exclude the underlying assets that have been securitised (securitised exposures), whether from the banking book or trading book, from the calculation of risk-weighted assets or reduce the capital requirement using credit risk mitigation (CRM) techniques in accordance with Part B.2.5. Originating banking institutions must still hold regulatory capital for any securitisation exposures retained.
- 6.8 Failure to meet any of the operational requirements referred to in paragraphs 6.10 and 6.11 would result in originating banking institutions having to hold regulatory capital for all of the underlying securitised exposures, as if the underlying exposures had not been securitised. Should this apply, originating banking institutions need not hold additional regulatory capital for the securitisation exposures retained.
- 6.9 Notwithstanding any capital relief granted, an originating banking institution is expected to monitor and control risks arising from the continued retention of the securitised exposures (e.g. as provider of liquidity facility). This should include the continuing assessment of any change in the risk profile of the transaction and the resulting impact on capital arising from the Labuan bank's role in the transaction. Corresponding contingency plans to deal with the risk and capital impact must be put in place.

F.2.1 Operational Requirements for Traditional Securitisations

6.10 An originating banking institution may exclude an underlying pool of exposures from the calculation of capital requirements, if all the following requirements are met on an ongoing basis:

- a) Significant credit risk associated with the securitised exposures has been transferred to third parties¹¹⁶.
- b) The originating banking institution does not maintain effective or indirect control over the transferred exposures. The assets are legally isolated¹¹⁷ from the originating banking institution in a manner (e.g. through the sale of assets or through sub-participation) that the exposures are beyond the reach of the originating banking institution and its creditors, even in bankruptcy or receivership. These conditions must be supported by an opinion provided by a qualified legal counsel¹¹⁸. The originating banking institution is deemed to have maintained effective or indirect control over the transferred credit risk exposures if it is:
 - i. able to repurchase from the transferee (i.e. SPV) the previously transferred exposures in order to realise their benefits; or
 - ii. obligated to retain the risk of the transferred exposures. The originating banking institution's retention of servicing rights to the exposures will not necessarily constitute indirect control of the exposures.
- c) The securities issued are not obligations of the originating banking institution. Thus, investors who purchase the securities have recourse only to the underlying pool of exposures.

¹¹⁶ For the purpose of the Securitisation Framework, with the exception of SPVs, entities in which the consolidated treatment is applied for capital adequacy purposes, as outlined in Guidelines on Capital Components are not included within the definition of a third-party.

¹¹⁷ Examples of methods of legal transfer normally adopted in traditional securitisation transaction are provided in **Appendix XIV**.

¹¹⁸ For this purpose, both internal and external legal counsels are acceptable. Nevertheless, Labuan FSA may, at its discretion require an additional legal opinion from an independent counsel where a second opinion is appropriate.

- d) The transferee is a special purpose vehicle (SPV) and the holders of the beneficial interests in that entity have the right to pledge or exchange the interests without restriction.
- e) The securitisation does not contain clauses that:
 - i. require the originating banking institution to alter systematically the underlying exposures to improve the credit quality of the pool;
 - ii. allow for increases in a retained first loss position or credit enhancement provided by the originating banking institution after the inception of the transaction; or
 - iii. increase the yield payable to parties other than the originating banking institution, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the underlying pool.
- f) Clean-up calls, if any, satisfy the conditions set out in Part F.4.1.

F.2.2 Operational Requirements for Synthetic Securitisations

6.11 An originating banking institution may recognise the use of CRM¹¹⁹ techniques such as collateral¹²⁰, guarantees or credit derivatives¹²¹ in a synthetic securitisation for capital relief purpose, if all the following requirements are met on an ongoing basis:

- a) Significant credit risk associated with the underlying exposure has been transferred to third parties¹²².
- b) The instruments used to transfer credit risk do not contain terms or conditions that limit the amount of credit risk transferred. Such clauses might include the

¹¹⁹ Use of CRM techniques must comply with the requirements as set out in **Part B.2.5**.

¹²⁰ Eligible collaterals are limited to that specified in paragraphs 2.103 and 2.104, including those that are pledged by SPVs.

¹²¹ Eligible guarantors are defined in paragraph 2.140. Labuan banks may not recognise SPVs as eligible guarantors or credit protection providers in the Securitisation Framework.

¹²² Refer to footnote 116.

following:

- i) materially limiting the credit protection or credit risk transfer (e.g. pre-determined significant materiality thresholds where credit protection is deemed not to be triggered even if a credit event occurs, or clauses that allow for the termination of the protection due to a deterioration in the credit quality of the underlying exposures);
 - ii) requiring the originating bank to alter the underlying exposures to improve the credit quality of the reference pool;
 - iii) increase in the Labuan banks' cost of credit protection in response to a deterioration in the quality of the reference pool;
 - iv) increase in the yield payable to parties other than the originating banking institution, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the reference pool; and
 - v) provide for increases in a retained first loss position or credit enhancement provided by the originating banking institution after the inception of the transaction.
- c) Securitisation structures that include a clean-up call feature must satisfy the conditions set out in Part F.4.1.
- d) A written opinion is obtained from a qualified legal counsel that confirms the enforceability of the contracts in all relevant jurisdictions.¹²³

6.12 Part B.2.5 provides the capital treatment for Labuan banks using CRM techniques to hedge underlying exposures and the treatment of any maturity mismatches¹²⁴ arising from synthetic securitisations. In particular, the maturity mismatch

¹²³ Refer to footnote 118.

¹²⁴ Maturity mismatches may arise in the context of synthetic securitisations when for example, a banking institution uses credit derivatives to transfer part or all of the credit risk of a specific pool of assets to third parties. When the credit derivatives unwind, the transaction will terminate. This implies that the effective maturity of the tranches of the synthetic securitisation may differ from that of the underlying exposures.

treatment set forth in paragraphs 2.147 to 2.150 must be applied. In cases where the exposures in the underlying pool have different maturities, the longest maturity shall be taken as the maturity of the pool.

F.3 STANDARDISED APPROACH FOR SECURITISATION EXPOSURES

F.3.1 TREATMENT OF ON-BALANCE SHEET SECURITISATION EXPOSURES

- 6.13 The risk-weighted asset amount of an on-balance sheet securitisation exposure is computed by multiplying the amount of the securitisation exposure by the appropriate risk weight provided in the tables “Securitisations” and “Securitisations (Short term ratings)” in **Appendix III**.
- 6.14 Originating banking institutions that retain their own-originated securitisation positions rated below investment grade must apply a 1250% risk weight on all of such exposures. Holdings of non-investment grade securitisation exposures, however, will not be subject to the 1250% risk weight if the originating banking institution does not also retain the first loss position (in whole or in part) of its own securitisation. In this case, the corresponding risk weight as provided in the tables mentioned in paragraph 6.13 shall be used.
- 6.15 The 1250% risk weighting imposed on unrated securitisation exposures, as indicated in **Appendix III** will not apply in the following circumstances:

A. Unrated most senior securitisation exposures

Where a Labuan bank that holds or guarantees the most senior exposure in a traditional or synthetic securitisation applies the ‘look-through’ approach in determining the average risk weight of the underlying exposure, the unrated exposures should be subject to the average risk weight¹²⁵. However, if the

¹²⁵ Labuan banks must be able to demonstrate that the composition of the underlying pool and the relevant risk weight of each individual exposure within the pool are quantifiable at all times.

resulting weighted average risk weight is higher than the risk weight of the securitisation exposure below it, then the risk weight of the latter shall apply.

B. Unrated securitisation exposures in a second loss or better position under an ABCP programme

Unrated securitisation exposures held by a Labuan bank to an ABCP programme will be subject to a risk weight which is the higher of 100% or the highest risk weight assigned to any of the underlying individual exposures covered by the facility, subject to the following requirements:

- i) the exposure is economically in a second loss position or better and the first loss position provides significant credit protection¹²⁶ to the second loss position;
- ii) the associated credit risk is the equivalent of investment grade or better¹²⁷; and
- iii) the Labuan bank holding such unrated securitisation exposure does not also retain the first loss position in the ABCP program.

F.3.2 TREATMENT OF OFF-BALANCE SHEET SECURITISATION EXPOSURES

6.16 Off-balance sheet securitisation exposures must be translated into an on- balance sheet exposure equivalent amount by multiplying the exposure with a credit conversion factor (CCF). The resulting amount is then weighted according to the relevant risk weights.

6.17 The CCFs, which are determined based on whether the off-balance sheet securitisation exposure qualifies as an 'eligible liquidity facility', an 'eligible servicer cash advance facility' or 'eligible underwriting facility' according to the eligibility criteria specified in Part F.4.3, are as follows:

¹²⁶ As may be demonstrated by models and simulation techniques.

¹²⁷ As may be evidenced by an indicative rating provided by an internal model.

	CCF	Risk Weight
Treatment of eligible liquidity facilities		
a) Externally rated eligible liquidity facility that meets the operational requirements in paragraph 6.49 and the requirements for use of external rating in Part F.4.4.	100%	Rating-based risk weight in Appendix III .
b) Non-externally rated eligible liquidity facility with an original maturity of more than 1 year.	50%	Highest risk weight assigned to any of the underlying individual exposures covered by the facility.
c) Non-externally rated eligible liquidity facility with an original maturity of 1 year or less.	20%	
Treatment of eligible servicer cash advance facilities		
a) Eligible servicer cash advance facility that meets the operational requirements in paragraph 6.50.	0%	Not applicable
Treatment of eligible underwriting facility		
a) Eligible underwriting facility that meets the operational requirements in paragraph 6.51.	50%	Highest risk weight assigned to any tranche of the securitization exposure underwritten
Others		
a) All other off-balance sheet securitisation exposures (including ineligible facilities), unless otherwise specified by Labuan FSA.	100%	Highest risk weight assigned to any tranche of the securitization exposure

F.3.3 TREATMENT OF OVERLAPPING EXPOSURES

6.18 A Labuan bank may provide several types of facilities (e.g. provision of a liquidity facility and a credit enhancement) in a securitisation transaction that can be drawn under various terms and conditions which may overlap with each other. Under circumstances where there is an explicit limit on the draw of more than one facility at a time for the overlapping exposure, capital should be provided as though the

institution had only provided one facility for the overlapping exposures¹²⁸. If the overlapping facilities are subject to different capital treatments, the treatment that results in the highest capital charge should be applied on the overlapping portion.

- 6.19 The treatment above does not apply in cases where the overlapping facilities are provided by two different Labuan banks and capital is allocated by each individual institution.

F.3.4 TREATMENT OF COUNTERPARTY CREDIT RISK FOR SECURITISATION EXPOSURES

- 6.20 When an interest rate or currency swap is provided to a securitisation transaction and where the counterparty is an SPV, the credit equivalent amount is computed based on the current exposure method specified in **Appendix VIII**. The highest risk weight of the underlying assets in the pool shall be applied to the resultant exposure amount in determining the counterparty credit risk.

F.3.5 TREATMENT OF SECURITISATION OF REVOLVING UNDERLYING EXPOSURES WITH EARLY AMORTISATION PROVISIONS

- 6.21 Early amortisation provisions are mechanisms that, once triggered, allow investors to be paid out prior to the maturity of the securities subject to the terms of the securitisation transaction. Generally, early amortisations are triggered based upon the performance or selected risk indicators of the underlying exposures, such as the excess spread level. The existence of an early amortisation feature¹²⁹ in a securitisation transaction exposes an originating banking institution to liquidity risk

¹²⁸ For example, if a Labuan bank provides a credit enhancement covering 10% of the underlying asset pool in an ABCP programme and a liquidity facility covering 100% of the same underlying asset pool, the Labuan bank would be required to hold capital against 10% of the underlying asset pool for the credit enhancement it is providing and 90% of the liquidity facility provided to the underlying asset pool. Effectively, the overlapping portion between the credit enhancement portion and the liquidity facility portion would be subject to a capital treatment which results in the highest capital charges.

¹²⁹ A clean-up call feature is distinguished from an early amortisation feature in the Guidelines, where a clean-up call is exercised only under the conditions specified in paragraph 6.44. This supports the differentiated capital treatment for early amortisation and clean-up call features.

if the securities issued are required to be prepaid early, for example where there is a significant reliance on securitisation to meet funding requirements.

6.22 Accordingly, originating banking institutions must hold capital against the risk exposure arising from the securitisation of revolving underlying exposures that contains an early amortisation feature. The specific capital treatment varies according to the type of early amortisation provision (i.e. controlled or non-controlled early amortisation) and type of underlying securitised exposures (i.e. committed or non-committed and retail or non-retail) as detailed below.

6.23 An originating banking institution is required to hold capital against all or a portion of the investors' interest (i.e. against both the drawn and undrawn balances related to the securitised exposures) when it sells revolving exposures into a structure that contains an early amortisation feature in the following manner:

$$\begin{aligned} & \text{Capital requirement for originating banking institutions} \\ &= (\text{Investors' interest}) \times \text{CCF} \times (\text{Risk weight of underlying exposures}) \end{aligned}$$

6.24 The total capital charge for all of its positions will be subject to a maximum capital requirement equal to the greater of:

- a) the capital required for retained securitisation exposures; or
- b) the capital requirement that would apply had the exposures not been securitised.

6.25 The specific credit conversion factors (CCFs) to be applied depend upon whether the early amortisation repays investors through a controlled or non-controlled mechanism.

6.26 For the purpose of the Securitisation Framework, a controlled early amortisation provision must meet all of the following conditions:

- a) an appropriate capital or liquidity plan is in place to ensure that sufficient capital and liquidity is available in the event of an early amortisation;

- b) interest, principal, expenses, losses and recoveries are shared on a pro-rata basis according to the Labuan bank's and investors' relative shares of the receivables outstanding at the beginning of each month. The same pro-rata share should be applied throughout the duration of the transaction, including the amortisation period;
 - c) a period for amortisation has been set, which should be sufficient for at least 90% of the total debt outstanding at the beginning of the early amortisation period to have been repaid or recognised as in default; and
 - d) the pace of repayment should not be any more rapid than would be allowed by straight-line amortisation over the period set out in criterion (c).
- 6.27 An early amortisation provision that does not satisfy the conditions above will be treated as a non-controlled early amortisation.
- 6.28 The CCFs to be applied depends on whether the securitised exposures are uncommitted retail credit lines (e.g. credit card receivables) or other credit lines (e.g. revolving corporate facilities). A credit line is considered uncommitted if it is unconditionally cancellable without prior notice.
- 6.29 The capital requirement outlined in Part F.3.5 does not apply under the following circumstances:
- a) where the securitisation transaction includes a replenishment structure under which the replenished exposures are not revolving in nature and the early amortisation ends the ability of the originating banking institution to add new exposures;
 - b) where the transaction has features that mirror a term structure (i.e. where the risk on the underlying exposures does not return to the originating bank);
 - c) a structure where investors remain fully exposed to future drawings by borrowers in respect of the revolving underlying exposures even after an early amortisation event has occurred; and

- d) the early amortisation clause is solely triggered by events not related to the performance of the securitised assets or the originating banking institution, such as material changes in tax laws or regulations.

Determination of CCFs for controlled early amortisation features

Uncommitted retail exposures

- 6.30 For uncommitted retail credit lines (e.g. credit card receivables) in securitisations containing controlled early amortisation features, Labuan banks must compare the three-month average excess spread to the point at which the originating banking institution is required to trap excess spread as stipulated under the terms of the securitisation structure (i.e. excess spread trapping point).
- 6.31 In cases where such a transaction does not require excess spread to be trapped, the trapping point is deemed to be 4.5 percentage points.
- 6.32 Labuan banks must divide the excess spread level by the transaction's excess spread trapping point, to determine the appropriate segments and apply the corresponding CCF, as outlined in the following table.

Controlled early amortisation features

	Uncommitted		Committed
Retail credit lines	3-month average excess spread Credit Conversion Factor (CCF)		90% CCF
	133.33% of trapping point or more	0% CCF	
	less than 133.33% to 100% of trapping point	1% CCF	
	less than 100% to 75% of trapping point	2% CCF	
	less than 75% to 50% of trapping point	10% CCF	
	less than 50% to 25% of trapping point	20% CCF	
	less than 25% of trapping point	40% CCF	
Non-retail credit lines	90% CCF		90% CCF

Other exposures

- 6.33 All other securitised revolving exposures (i.e. those that are committed and all non-retail exposures) with controlled early amortisation features will be subject to a CCF of 90% against the off-balance sheet exposures.

Determination of CCFs for non-controlled early amortisation features

- 6.34 Early amortisation features that do not satisfy the definition of a controlled early amortisation will be considered non-controlled and treated as follows:

Uncommitted retail exposures

- 6.35 For uncommitted retail credit lines (e.g. credit card receivables) in securitisations containing non-controlled early amortisation features, Labuan banks must compare the three-month average excess spread to the point at which the Labuan bank is required to trap excess spread under the terms of the securitisation structure (i.e. excess spread trapping point). In cases where such a transaction does not require excess spread to be trapped, the trapping point is deemed to be 4.5 percentage points. The excess spread level shall be divided by the transaction's excess spread trapping point to determine the appropriate segments and apply the corresponding credit conversion factors, as outlined in the following table.

Non-controlled early amortisation features

	Uncommitted		Committed
Retail credit lines	3-month average excess spread Credit Conversion Factor (CCF)		100% CCF
	133.33% of trapping point or more	0% CCF	
	less than 133.33% to 100% of trapping point	5% CCF	
	less than 100% to 75% of trapping point	15% CCF	
	less than 75% to 50% of trapping point	50% CCF	
	less than 50% of trapping point	100% CCF	
Non-retail credit lines	100% CCF		100% CCF

Other exposures

- 6.36 All other securitised revolving exposures (i.e. those that are committed and all non-retail exposures) with non-controlled early amortisation features will be subject to a CCF of 100% against the off-balance sheet exposures.

Pools comprising both revolving and term exposures

- 6.37 For securitisation structures wherein the underlying pool comprises both revolving and term exposures, the originating banking institution must apply the relevant early amortisation treatment to that portion of the underlying pool containing revolving exposures.

F.3.6 TREATMENT OF CREDIT RISK MITIGATION FOR SECURITISATION EXPOSURES

- 6.38 The requirements outlined in this section provide the treatment for Labuan banks that:

- a) obtain credit risk mitigants such as guarantees, credit derivatives, collateral and on-balance sheet netting to cover the credit risk of a securitisation exposure (e.g. an asset-backed securities tranche); and
- b) provide such credit risk mitigation to a securitisation exposure.

6.39 When a Labuan bank other than an originating banking institution provides credit protection to a securitisation exposure, it must calculate the capital requirement on the covered exposure as if it were an investor in that securitisation. For example, if protection is provided to an unrated first loss position, a risk weight of 1250% shall be applied accordingly to such credit protection.

Guarantees and credit derivatives

6.40 Where guarantees or credit derivatives are provided by eligible entities¹³⁰, Labuan banks may take into account such credit protection in calculating capital requirements for their securitisation exposures in accordance to CRM treatments specified in paragraphs 2.135 to 2.146.

Eligible collateral

6.41 Eligible collateral is limited to those recognised under paragraphs 2.103 and 2.104, including collateral that may be pledged by an SPV.

Maturity mismatches

6.42 Where a maturity mismatch exists in any credit risk mitigation for securitisation exposures, the capital requirement for the maturity mismatch as outlined in paragraphs 2.147 to 2.150 shall be applied. When the exposures being hedged have different maturities, the longest maturity must be used.

¹³⁰ Refer to footnote 122.

F.4 OTHER OPERATIONAL REQUIREMENTS

F.4.1 OPERATIONAL REQUIREMENTS AND TREATMENT OF CLEAN-UP CALLS

- 6.43 Certain securitisation transactions may incorporate a clean-up call feature. A clean-up call is an option that permits the securitisation exposures (e.g. asset-backed securities) to be called before all of the underlying exposures or securitisation exposures have been repaid. In the case of traditional securitisations, this is generally accomplished by repurchasing the remaining securitisation exposures once the pool balance or outstanding securities have fallen below some specified level that renders the securitisation uneconomical to continue. In the case of a synthetic transaction, the clean-up call is a clause in the securitisation documentation that provides an option to extinguish the credit protection.
- 6.44 In general, originating banking institutions are not required to set aside regulatory capital for the existence of a clean-up call, provided that all the following conditions are fully met:
- a) The exercise of the clean-up call is not mandatory, in form or in substance, but rather is at the sole discretion of the originating banking institution
 - b) The clean-up call is not structured to avoid allocating losses to credit enhancements or positions held by investors, or otherwise structured to provide a credit enhancement; and
 - c) The clean-up call is only exercisable when 10% or less of the original underlying portfolio or securities issued remains, or for synthetic securitisations, when 10% or less of the original reference portfolio value remains.
- 6.45 A clean-up call that does not meet all of the requirements above, hereinafter referred to as 'non-eligible clean-up call', shall be subject to the following treatment:

- a) For a traditional securitisation, the underlying exposures must be treated as if the exposures were not securitised. Labuan banks should deduct in the calculation of CET1 Capital any income in equity capital resulting from a securitisation transaction, such as that associated with expected future margin income resulting in a gain-on-sale; and
- b) For synthetic securitisations, the purchaser of protection must hold capital against the entire amount of the synthetically securitised exposures as if it had not benefited from any credit protection.

F.4.2 TREATMENT FOR IMPLICIT SUPPORT

- 6.46 Implicit support arises when a Labuan bank provides support to a securitisation beyond its predetermined contractual obligations. This implicit support increases market expectations that the Labuan bank might continue to provide future support to the securitisation, thereby understating the degree of risk transfer and the required level of regulatory capital by the Labuan bank.
- 6.47 Examples of implicit support include the purchase of deteriorating credit risk exposures from the underlying pool, the sale of discounted credit risk exposures into the pool of securitised credit risk exposures, the purchase of underlying exposures at above market price or an increase in the first loss position according to the deterioration of the underlying exposures.
- 6.48 Labuan banks should disclose to Labuan FSA the nature of implicit support extended to a securitisation transaction. Where such implicit support is extended, the Labuan bank would be required to:
- a) hold capital against all of the exposures associated with the securitisation transaction as if the exposures had not been securitised or as if the transaction did not benefit from any credit protection (in the case of synthetic securitisation);
 - b) deduct in the calculation of CET1 Capital any income in equity capital resulting from a securitisation transaction, such as that associated with

expected future margin income resulting in a gain-on-sale; and

- c) disclose in the financial statement the details of the implicit support and its capital impact.

F.4.3 ELIGIBLE OFF-BALANCE SHEET SECURITISATION EXPOSURES

Eligible liquidity facilities

6.49 An off-balance sheet securitisation exposure can be classified as an eligible liquidity facility, if the following conditions are met:

- a) The facility documentation must clearly identify and limit the circumstances under which it may be drawn. Draws under the facility must be limited to the amount that is likely to be repaid fully from the liquidation of the underlying exposures and any credit enhancements provided by parties other than the Labuan bank providing the liquidity facility. In addition, the facility must not cover any losses incurred in the underlying pool of exposures prior to a draw, or be structured such that draw-down is certain (as indicated by regular or continuous draws);
- b) The facility must be subject to an asset quality test that precludes it from being drawn to cover credit risk exposures that are in default as defined in **Appendix V**. In addition, if the exposures that a liquidity facility is required to fund are externally rated securities, the facility can only be used to fund such securities that are rated at least investment grade at the time of funding;
- c) The facility cannot be drawn after all applicable (e.g. transaction- specific and programme-wide) credit enhancements from which the liquidity would benefit have been exhausted; and
- d) Repayment of draws on the facility (e.g. cash flow generated from underlying assets acquired by the SPV) must not be subordinated to any interests of any note holder in the programme (e.g. ABCP programme) or subject to any deferral or waiver.

Eligible servicer cash advance facilities

6.50 Undrawn cash advances extended by a Labuan bank acting as a servicer of a securitisation, to facilitate an uninterrupted flow of payments to investors, can be classified as an eligible servicer cash advance facility, if the following conditions are met:

- a) the provision of such facilities must be contracted;
- b) the undrawn cash advances or facilities must be unconditionally cancellable at the discretion of the servicer Labuan bank without prior notice;
- c) the servicer is entitled to full reimbursement and this right is senior to other claims on cash flows from the underlying pool of exposures; and
- d) such cash advances should not act as a credit enhancement to the securitisation.

Eligible underwriting facilities

6.51 An off-balance sheet securitisation exposure can be classified as an eligible underwriting facility, if the following conditions are met:

- a) the underwriting facility must be clearly documented with the specified amount and time period of the facility stipulated. The facility should be separated from any other facility provided by the Labuan bank;
- b) the facility is cancellable at the discretion of the Labuan bank within a reasonable period of notice; and
- c) a market exists for the type of underwritten securities.

F.4.4 REQUIREMENTS FOR USE OF EXTERNAL RATINGS

6.52 For risk-weighting of rated securitisation exposures, Labuan banks are only allowed to use external ratings provided by ECAs recognised by Labuan FSA, as listed in **Appendix III**. In addition, Labuan banks must ensure that the use of

external ratings for risk-weighted capital adequacy purposes meets the following conditions:

- a) The external rating is made publicly available i.e. a rating must be published in an accessible form. Credit ratings that are made available only to the parties to a securitisation transaction (e.g. rating on a particular securitisation exposure made available upon request by parties to the transaction) are not considered as a public rating for purposes of the Securitisation Framework;
- b) The external rating is reflective of the entire amount of the Labuan bank's credit risk exposure with regard to all payments owed to it. For example, if a Labuan bank is owed both principal and interest, the assessment must fully take into account and reflect the credit risk associated with timely repayment of both principal and interest;
- c) External ratings provided by the ECAs are applied consistently across a given type of securitisation exposure. In particular, Labuan banks are not allowed to use an ECA's credit rating for one or more tranches and another ECA's rating for other tranches within the same securitisation structure that may or may not be rated by the first ECA. In cases where a securitisation exposure is rated by more than one ECA, the requirements in paragraph 2.7 shall apply;
- d) If CRM is provided directly to an SPV by an eligible guarantor¹³¹ (i.e. eligible credit protection) and is reflected in the external rating assigned to a securitisation exposure, the risk weight associated with that external rating should be used. However, if the CRM provider is *not* an eligible guarantor, the rating for the 'guaranteed' securitisation exposure should not be recognised and the exposure should be treated as unrated (except for securitisation exposures mentioned in paragraph 6.15); and
- e) In the situation where CRM is applied to a specific securitisation exposure within a given structure (e.g. hedging a senior tranche exposure), Labuan

¹³¹ Refer to footnote 122.

banks shall disregard the rating attached to the exposure and use the CRM treatment instead, as outlined in Part B.2.5 to recognise the hedge. However, if the CRM becomes ineligible, the rating attached to the securitisation exposure should be used for risk-weighting purposes¹³².

6.53 While the Banking Capital Adequacy Framework primarily relies on external credit assessments, Labuan banks must exercise prudence to ensure that the external credit assessments do not substitute for the Labuan bank's own due diligence in the credit assessment process. In order to use external ratings under the Securitisation Framework, a Labuan bank must have the following:

- a) A comprehensive understanding of the risk characteristics of its individual securitisation exposures, whether on balance sheet or off- balance sheet, as well as the risk characteristics of the pools underlying the securitisation exposures. As part of their investment due diligence process, Labuan banks should also consider the extent to which the originator or sponsor of the securitisation shares a similar economic interest as that of investors (for example, as indicated by the proportion of underlying exposures retained by the originator);
- b) A thorough understanding of all structural features of a securitisation transaction that would materially impact the nature of the Labuan bank's exposures to the transaction, such as the contractual waterfall and waterfall-related triggers, credit enhancements, liquidity enhancements, market value triggers, and deal-specific definitions of default; and
- c) Access to performance information on the underlying pools on an ongoing basis in a timely manner. Such information may include, as appropriate: exposure type; percentage of loans 30, 60 and 90 days past due; default rates; prepayment rates; loans in foreclosure; property type; occupancy;

¹³² For example, when a Labuan bank is investing in a BBB-rated ABS tranche and subsequently hedges the investment using CDS with an eligible counterparty under the framework, the rating- based risk weight for the ABS tranche shall be disapplied and the CRM treatment shall be used instead. However, if the CRM provider is ineligible under the framework, the banking institution shall fall back to the ratings-based capital treatment.

average credit score or other measures of credit worthiness; average loan-to-value ratio; and industry and geographic diversification. For re-securitisations, Labuan banks should have information not only on the underlying securitisation tranches, such as the issuer name and credit quality, but also on the characteristics and performance of the pools underlying the securitisation tranches.

Labuan Financial Services Authority

30 December 2016 (Revised)

23 April 1997 (1st Issued)

APPENDICES

Appendix I Areas of National Discretion

Paragraph in Basel document	Areas of National Discretion	Treatment
B.1. Standardised Approach for Credit Risk		
54	Lower risk weight to claims on sovereign (or central bank) in domestic currency if funded in that currency (Treatment where other supervisors have accorded)	Apply 0% risk weight for exposures to Malaysian government and BNM.
55	Recognition of Export Credit Agencies' assessments	Not recognised
57	Claims on domestic PSEs similar to claims on banking institutions	Domestic PSEs accorded 20% if criteria specified under paragraph 2.18 met. Else treated as corporates.
58	Claims on domestic PSEs as if sovereigns (Treatment if other regulators adopt preferential treatment)	Not exercised.
60-64	Claims on banking institutions: Option 1, risk weight one category less than sovereign; Option 2, risk weight on the banking institutions' external credit assessment	Option 2 applied.
64	Preferential risk weight treatment for claims on banking institutions with an original maturity of 3 months or less and denominated and funded in the domestic currency	Exercised.
65	Allow securities firms to be treated similarly as banking institutions	Not exercised. Securities firms to be treated as corporates.
67	Increase standard risk weight for unrated claims when a higher risk weight is warranted by the default experience in their jurisdiction	Labuan FSA has accorded a 100% risk weight for unrated corporates.

Paragraph in Basel document	Areas of National Discretion	Treatment
68	To risk weight all corporate claims at 100% without regard to external ratings	Not exercised.
69	Definition of claims included in regulatory retail portfolio	Definition provided under paragraph 2.28.
70	Granularity criterion for the retail portfolio, limit of 0.2% of the overall retail portfolio	0.2% threshold applied.
71	To increase risk weights for regulatory retail exposures	Risk weight maintained at 75%.
72	Definition of claims secured by residential mortgages	Definition provided under paragraph 2.30.
72-73	To increase preferential risk weights for claims secured by residential properties	Risk weights for residential mortgages subject to above criteria and dependent on exposure loan-to-value ratio.
74 (Footnote (FN) 23)	Commercial real estate 50% risk weight only if strict conditions are met	Not exercised.
75 & 78	Risk weight for the unsecured portion of a loan past due, net of specific provisions, reduced to 50% when specific provisions are more than 50%	Exercised.
75 (FN 24)	Past due treatment for non past due loans to counterparties subject to a 150% risk weight	Exercised
76 (FN 25)	Transitional period of three years for recognition of a wider range of collateral for higher risk categories (past due assets)	Not exercised
77	If a past due loan is fully secured by other forms of collateral, a 100% risk weight may apply when provisions reach 15% of the outstanding amount	Not exercised.
80	150% or higher risk weight to other assets	List specified under paragraph 2.40.
81 (FN 26)	Risk weight gold bullion at 0%	Exercised.

Paragraph in Basel document	Areas of National Discretion	Treatment
92	Mapping External Credit Assessment Institutions' assessments to the risk weights	Not exercised. Labuan FSA will undertake continuous monitoring of local ECAI's default experience to assess appropriateness of risk weights.
102 (FN 29)	Use a borrower's domestic currency rating for exposure in foreign exchange transactions when loan extended by a Multilateral Development Banks.	Exercised.
108	Use of unsolicited ratings	Not exercised.
201	Lower risk weight to claims guaranteed by the sovereign (or central bank), when denominated and funded in domestic currency	Exercised.
711	Lower specific risk charge where government paper denominated in domestic currency is funded in same currency	Exercised.
154	Banking institution's internal haircut (H) for each category of security when debt securities are rated BBB-/A-3 or higher	Not exercised.
170 & 294	Banking institutions can apply a H=0 for certain types of repo-style transaction	Exercised.
171	Definition of core market participants	Sovereign, central banks and licensed Labuan banks and Islamic Labuan banks.
172	Follow other supervisors preferential treatments with regard to carve-out	Exercised.
178	Supervisors may allow banks to use VAR approach for repo-style transactions	Exercised.
C. Operational Risk		
650	Definition of gross income	Definition provided under paragraph 3.9 to 3.10.

Appendix II Eligibility Criteria for External Credit Assessment Institution (ECAI) Recognition

Criterion 1: Objectivity of credit assessment methodology and process

The methodology and process for assigning credit ratings must be rigorous and systematic. Before being recognised by Labuan FSA, an assessment methodology for the broad asset class for which recognition is sought must have been established for at least one year and preferably three years.

1. The objectivity of an ECAI's credit assessment methodology can be assessed on the following parameters:
 - a) Any credit assessment methodology adopted by an ECAI must produce an informed and sound opinion of the creditworthiness of rated entities. The credit assessments must be based on all relevant information that is available at the time the assessments are issued;
 - b) All qualitative and quantitative factors known to be relevant in determining the creditworthiness of the rated entities must be incorporated in the methodology;
 - c) The ECAI's credit assessment methodologies and processes should provide a sufficient level of consistency and discriminate between different levels of risk to provide the basis for capital requirements under the Standardised Approach for credit risk; and
 - d) Processes to ensure that consistent application of any credit assessment methodology should be in place such that equivalent credit assessments are given to identical rated entities or issuances, and that different analysts or rating committees working independently within the ECAI would assign equivalent credit ratings to a particular entity or issuance.
2. With regard to Islamic debt securities, Labuan FSA expects that the ECAI has a documented methodology to identify and assess the inherent risk drivers peculiar to Islamic debt securities. Processes should also be in place to ensure consistency

in the application of credit assessment methodologies of Islamic entities and issuances.

Criterion 2: Ongoing review of credit assessment methodology

The methodology for assigning credit ratings must be validated by the ECAI based on its historical experience. Before being recognised by Labuan FSA, rigorous backtesting must have been established for at least one year and preferably three years.

3. The review process of the credit assessment methodology can be assessed on the following parameters:
 - a) The process of validating the methodologies is based on historical experience. Quantitative validation will need to be based on the ECAI's credit assessments (the outputs of the methodology) rather than on the methodology itself;
 - b) The quantitative assessment should confirm the stability of credit assessments as well as the discriminatory power and the stability of discriminatory power of credit assessments over time;
 - c) Procedures should be in place to ensure that systematic rating errors highlighted by backtesting will be incorporated into credit assessment methodologies and rectified; and
 - d) If sufficient data is available, the ECAI should undertake separate backtesting for each of the broad asset classes for which an ECAI is seeking recognition.

Criterion 3: Ongoing review of individual credit assessments

ECAs are expected to conduct an ongoing review of the credit assessments. Such reviews shall take place after any material event in a rated entity or at least annually.

4. The ECAI must ensure that credit assessments remain consistent and robust over time and market conditions.

5. The ECAI must ensure that reliable processes that are able to detect changes in conditions surrounding a rated entity that are sufficiently material to alter its credit assessments are in place.
6. The ECAI must ensure that a credit assessment is indeed revised when the change in operating conditions is material enough to warrant a revision. Notwithstanding this, individual credit assessments must be reviewed at least annually.

Criterion 4: Independence

The ECAI should be independent and should not be subject to any 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 or the shareholder structure of the assessment institution may be seen as creating a conflict of interest.

7. The rating methodologies and process of an ECAI must be free from any influence, which may affect its ability to conduct credit assessments.
8. There must also be procedures to ensure that its methodologies are free from any influences or constraints that may influence the credit assessments.
9. The ECAI must ensure that:
 - a) it has adopted, monitored, and successfully applied internal procedures to ensure that all credit assessments are formulated in a consistent and objective manner, particularly in situations where conflicts of interest may arise and could threaten its objectivity; and
 - b) it has mechanisms in place to identify actual and potential conflicts of interest and take reasonable measures to prevent, manage and eliminate them, so that they do not impair the production of independent, objective and high quality credit assessments.

10. Where an ECAI has additional business with rated entities (for example advisory services, data services, consulting services), the ECAI should also disclose to Labuan FSA the nature of the services and the general nature of the compensation arrangements for the provision of these services.
11. The ECAI should maintain and document strict fire-walls on information sharing between their rating assignment teams and other business lines.
12. ECAs should disclose any significant business relationships between ECAI employees and the rated entities.

Criterion 5: International access and transparency

The individual assessments should be available to both domestic and foreign institutions with legitimate interests and at equivalent terms. In addition, the general methodology used by the ECAI should be publicly available to allow all potential users to decide whether they are derived in a reasonable way.

13. This criterion is intended to create a level playing field by ensuring that all institutions having a 'legitimate interest' in an ECAI's credit assessments, in whatever jurisdiction, have equal and timely access to them.
14. ECAs that wish to be recognised as eligible must make their credit assessments accessible at least to all institutions having a 'legitimate interest'. Institutions having a 'legitimate interest' are those institutions that need to calculate their regulatory capital requirements, and that intend to use the credit assessments of the respective ECAI for risk weighting purposes.
15. 'At equivalent terms' means that under the same economic circumstances, access to credit assessments should be provided on identical terms, without any undue price discrimination.

Criterion 6: Disclosure

An ECAI should use appropriate methods of disclosure to ensure public access to all material information. This is to allow all potential users to decide whether the assessments are derived in a reasonable way.

16. At a minimum, ECAIs should disclose the following to the public:
 - i. the methodologies (these include the definition of default, the time horizon and the meaning of each rating);
 - ii. as promptly as possible, any material changes in methodology referred;
 - iii. the validation results on their methodology (these include the actual default rates experienced in each assessment category and the transitions of the assessments); and
 - iv. whether a credit assessment is unsolicited.
17. An ECAI should use appropriate methods of disclosure to ensure public access to the abovementioned information.

Criterion 7: Resources

An ECAI should have sufficient resources to carry out high quality credit assessments. These resources should allow for substantial ongoing contact with senior and operational levels within the entities assessed in order to add value to the credit assessments. Such assessments should be based on methodologies combining qualitative and quantitative approaches.

18. In terms of staffing and expertise, an ECAI should ensure that its staff has the levels of skills and experience necessary to perform the tasks required of them, competently and thoroughly.
19. The ECAI should also have sufficient resources to carry out consistent assessments and have frequent contacts with the rated companies.

20. In addition, analysts at ECAIs that rate Islamic issues need to have undergone sufficient training to develop the requisite understanding in rating Islamic issues and the specific risks contained in these issues.

Criterion 8: Credibility

Labuan FSA shall verify that the ECAI's individual credit assessments are recognised in the market as credible and reliable by the users of such credit assessments.

21. Labuan FSA shall assess the ECAI's credibility according to factors such as the following:
- i. the extent to which it meets the overall recognition criteria;
 - ii. the extent to which independent parties (investors, insurers, trading partners) rely on ECAI's assessment; and
 - iii. the extent to which market prices of rated securities are differentiated according to the ECAI's ratings.

Appendix III Risk Weights and Rating Categories

Sovereigns and Central Banks

Rating Category	Standard & Poor's Rating Services (S&P)	Moody's Investors Service (Moody's)	Fitch Ratings (Fitch)	Rating and Investment Information, Inc. (R&I) ¹³³	Risk weight
1	AAA to AA-	Aaa to Aa3	AAA to AA-	AAA to AA-	0%
2	A+ to A-	A1 to A3	A+ to A-	A+ to A-	20%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	BBB+ to BBB-	50%
4	BB+ to B-	Ba1 to B3	BB+ to B-	BB+ to B-	100%
5	CCC+ to D	Caa1 to C	CCC+ to D	CCC+ to C	150%
Unrated					100%

¹³³ External credit assessments produced by Rating and Investment Information, Inc. on Islamic debt securities are not recognised by Labuan FSA in determining the risk weights for exposures to the asset classes listed in this Appendix.

Banking institutions

Rating Category	S&P	Moody's	Fitch	R&I	RAM Rating Services Berhad (RAM)	Malaysian Rating Corporation Berhad (MARC)	Risk weight	Risk weight (original maturity of 6 months or less) ¹³⁴	Risk weight (original maturity of 3 months or less) ¹³⁵
1	AAA to AA-	Aaa to Aa3	AAA to AA-	AAA to AA-	AAA to AA3	AAA to AA-	20%	20%	20%
2	A+ to A-	A1 to A3	A+ to A-	A+ to A-	A1 to A3	A+ to A-	50%	20%	
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	BBB+ to BBB-	BBB1 to BBB3	BBB+ to BBB-	50%	20%	
4	BB+ to B-	Ba1 to B3	BB+ to B-	BB+ to B-	BB1 to B3	BB+ to B-	100%	50%	
5	CCC+ to D	Caa1 to C	CCC+ to D	CCC+ to C	C1 to D	C+ to D	150%	150%	
Unrated							50%	20%	

Corporate

Rating Category	S&P	Moody's	Fitch	R&I	RAM	MARC	Risk weight
1	AAA to AA-	Aaa to Aa3	AAA to AA-	AAA to AA-	AAA to AA3	AAA to AA-	20%
2	A+ to A-	A1 to A3	A+ to A-	A+ to A-	A1 to A3	A+ to A-	50%
3	BBB+ to BB-	Baa1 to Ba3	BBB+ to BB-	BBB+ to BB-	BBB1 to BB3	BBB+ to BB-	100%
4	B+ to D	B1 to C	B+ to D	B+ to D	B1 to D	B+ to D	150%
Unrated							100%

¹³⁴ Short-term exposures on banking institutions are defined as exposures with an original maturity of six months or less. The preferential treatment is available for exposures to both rated and unrated banking institutions, but not for banking institutions rated below B-.

¹³⁵ This preferential risk weight is accorded to all interbank exposures with an original maturity of three months or less denominated.

Banking institutions and Corporate (Short term ratings)

Rating Category	S&P	Moody's	Fitch	R&I	RAM	MARC	Risk weight
1	A-1	P-1	F1+, F1	a-1+, a-1	P-1	MARC-1	20%
2	A-2	P-2	F2	a-2	P-2	MARC-2	50%
3	A-3	P-3	F3	a-3	P-3	MARC-3	100%
4	Others	Others	B to D	b, c	NP	MARC-4	150%

Securitisations

Rating Category	S&P	Moody's	Fitch	R&I	RAM	MARC	Risk weight
1	AAA to AA-	Aaa to Aa3	AAA to AA-	AAA to AA-	AAA to AA3	AAA to AA-	20%
2	A+ to A-	A1 to A3	A+ to A-	A+ to A-	A1 to A3	A+ to A-	50%
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-	BBB+ to BBB-	BBB1 to BBB3	BBB+ to BBB-	100%
4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-	BB+ to BB-	BB1 to BB3	BB+ to BB-	350%
5	B+ and below	B1 and below	B+ and below	B+ and below	B1 and below	B+ and below	1250%
Unrated							1250%

Securitisations (Short term ratings)

Rating Category	S&P	Moody's	Fitch	R&I	RAM	MARC	Risk weight
1	A-1	P-1	F1+, F1	a-1+, a-1	P-1	MARC-1	20%
2	A-2	P-2	F2	a-2	P-2	MARC-2	50%
3	A-3	P-3	F3	a-3	P-3	MARC-3	100%
4	Others or unrated	Others or unrated	Others or unrated	b, c	NP	MARC-4	1250%

For the risk weights in the tables “Securitisations” and “Securitisations (Short term ratings)” to be eligible for use under this framework, Labuan banks should ensure that external ratings produced by external credit assessment institutions (ECAIs) meet the operational requirements outlined in **Part F.4.4**.

Appendix IV Summary of Risk Weights for Loans Secured by Residential Mortgages

	Risk weight	
	Performing	Non-Performing*
Meets criteria in paragraph 2.30 and: loan-to-value ratio < 80%	35%	100%
loan-to-value ratio 80% - 90%	50%	100%
Does not meet criteria in paragraph 2.30 or loan-to-value ratio > 90%	75%	150%
Loans-to-value > 90%	100%	150%
Priority sector lending: loan-to-value ratio < 80%	35%	100%
loan-to-value ratio = or > 80%	50%	100%
loan-to-value ratio > 90%	75%	150%
Residential mortgages combined with overdraft facilities: Residential mortgage	Dependent on criteria & loan-to-value ratio	
Overdraft facility	75% subject to meeting retail portfolio criteria	150%
Residential Mortgage loans on abandoned projects	150%	
*Risk weights could be lower depending on level of provisioning as per paragraphs 2.36 and 2.38		

Appendix V Definition of Default

1. A default is considered to have occurred when:
 - i. The Labuan bank considers that an obligor is “unlikely to repay” in full its credit obligations to the banking group, without recourse by the Labuan bank to actions such as realising security; or
 - ii. The obligor has breached its contractual repayment schedule and is past due for more than 90 days on any material credit obligation to the banking group.
 - a. Under national discretion, Labuan FSA has elected to apply the definition of default for residential mortgages past due for more than 180 days.
 - b. For securities, a default occurs immediately upon breach of contractual repayment schedule.
 - c. For overdrafts, a default occurs when the obligor has breached the approved limits for more than 90 days.
 - d. Where repayments are scheduled on three months or longer, a default occurs immediately upon breach of contractual repayment schedule.

However, Labuan banks which adopt a more stringent definition of default internally are required to apply such internal definition for regulatory capital purposes.

2. Elements to be taken as an indication of unlikelihood to repay:
 - i. The Labuan bank ceases to accrue all or partially, revenue due from a credit obligation in accordance with the terms of the contract.
 - ii. The Labuan bank is uncertain about the collectability of a credit obligation which has already been recognised as revenue and then treats the uncollectible amount as an expense.
 - iii. The Labuan bank makes a charge off or an account-specific provision or impairment resulting from a significant perceived decline in credit quality

subsequent to the Labuan bank taking on the exposure. (Provisions on equity exposures set aside for price risk does not signal default).

- iv. The Labuan bank sells the credit obligation at a material credit related economic loss. (For securities financing, when collateral is liquidated not due to the deterioration of an obligor's creditworthiness but due to a fall in the value of collateral to restore an agreed collateral coverage ratio and has been disclosed to the customer in writing at the inception of the facility should not be recorded as a default).
- v. The Labuan bank consents to a restructuring¹³⁶ of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness, or postponement of principal, interest or (where relevant) fees. This constitutes a granting of a concession that the Labuan bank would not otherwise consider.
- vi. The default of a related obligor. Labuan banks must review all related obligors in the same group to determine if that default is an indication of unlikelihood to repay by any other related obligor. Labuan banks must judge the degree of economic interdependence of the obligor towards its related entities.
- vii. Acceleration of an obligation.
- viii. An obligor is in significant financial difficulty. An indication could be a significant downgrade of an obligor's credit rating.
- ix. Default by the obligor on credit obligations to other financial creditors, e.g., financial institutions or bondholders.
- x. The Labuan bank has filed for the obligor's bankruptcy or a similar order in respect of the obligor's credit obligation to the banking group.
- xi. The obligor has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of the credit obligations to the banking group.

¹³⁶ Shall also include rescheduling of facilities.

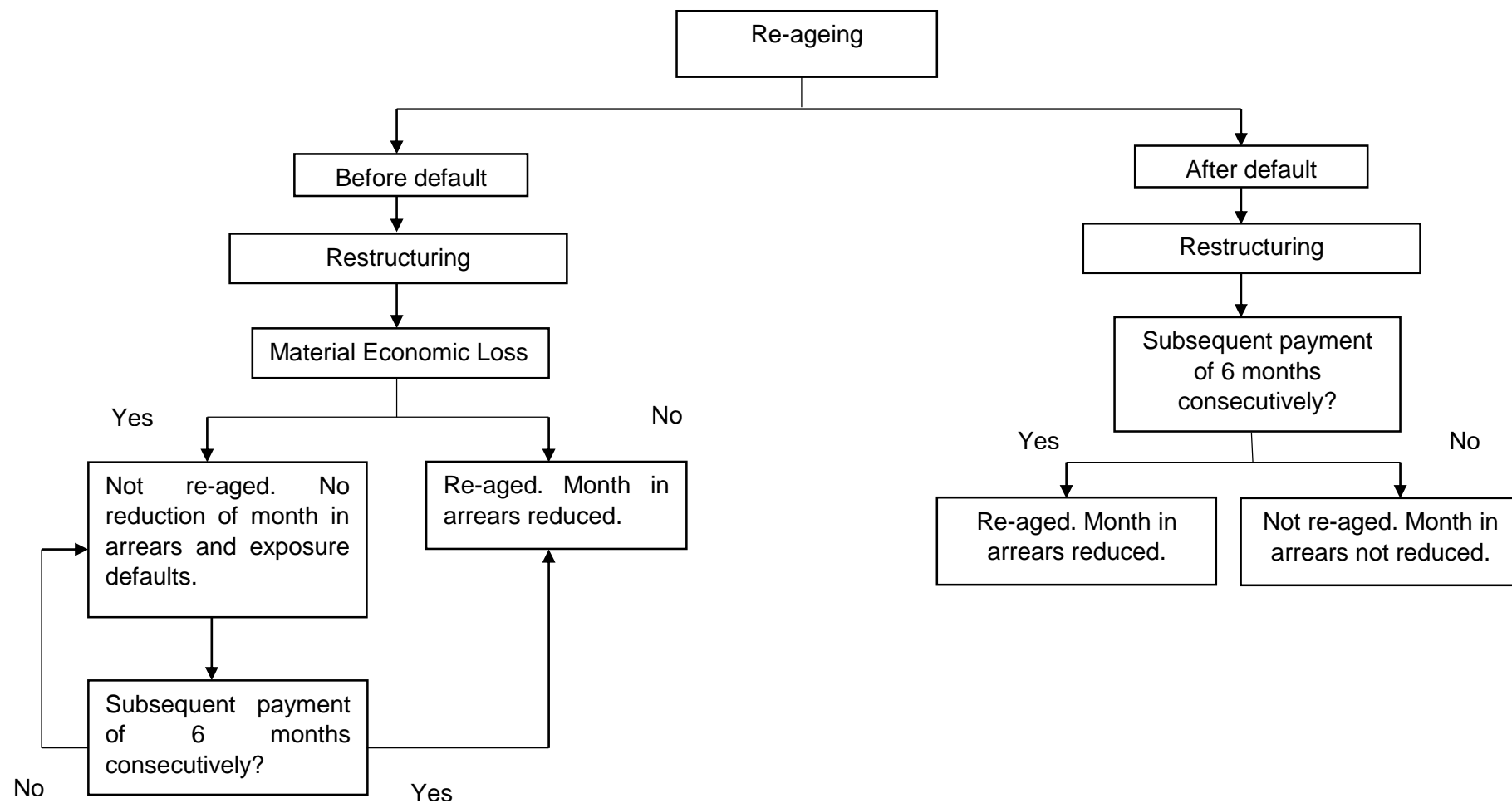
Default at Facility Level

3. For retail exposures Labuan banks are allowed to apply the definition of default at facility level, rather than at obligor level. For example, an obligor might default on a credit card obligation and not on other retail obligations. However, Labuan banks should be vigilant and consider cross-default of facilities of an obligor if it is representative of his incapacity to fulfill other obligations.
4. A default by a corporate borrower shall trigger a default on all of its other exposures.

Re-Ageing

5. Re-ageing is a process by which Labuan banks adjust the delinquency status of exposures based on subsequent repayment of arrears or restructuring. This is done when all or some of the arrears under the original repayment schedule have been paid off or repackaged into a new repayment structure.
6. At a minimum, the re-ageing policy of Labuan banks must include:
 - i. appropriate approving authority and reporting requirements;
 - ii. minimum age of a facility before it is eligible for re-ageing;
 - iii. delinquency levels of facilities that are eligible for re-ageing
 - iv. maximum number of re-ageing per facility; and
 - v. re-assessment of the borrower's capacity to repay.
7. Re-ageing is allowed for both defaulted and delinquent exposures. However, the exposure shall not be immediately re-aged if the restructuring causes a diminished financial obligation or material economic loss or it is assessed that the borrower does not have the capacity to repay under the new repayment structure. For defaulted exposures, re-ageing is permitted after the obligation has been serviced promptly for 6 months consecutively. For exposures with repayments scheduled at three months or longer, re-ageing is only permitted after the obligation has been serviced promptly for two consecutive payments. A diagrammatic illustration of re-ageing is given in **Appendix Va**.

Appendix Va Diagrammatic Illustration of Re-ageing via Restructuring



Note: Loans are still subject to assessment based on these criteria even though there has been a reduction in the month in arrears or re-classification of loan from non-performing to performing under *Guidelines on the Classification and Impairments Provision for Loans/Financing for Labuan Banks*.

Appendix VI Illustration on Risk-Weighted Asset (RWA) Calculation for Defaulted Exposures and Exposures Risk-Weighted at 150%

Example 1: Term loan

Defaulted loan to unrated corporate amounting to USD1,000,000 secured by eligible collateral (Haircut: 25%). The Labuan bank has already set aside specific provisions of USD50,000 for this loan.

Since specific provisions is only 5% of outstanding loan amount [i.e. USD50,000/USD1,000,000], the applicable risk weight charge is 150%. The computation of the RWA is as follows:

$$\begin{aligned}\text{Collateral amount} &= \text{USD}500,000 \times (100\% - 25\%) \\ &= \text{USD}375,000 \\ \\ \text{RWA} &= 150\% \times \text{unsecured portion of outstanding loan net of specific provisions} \\ &= 150\% \times (\text{USD}1,000,000 - \text{USD}375,000 - \text{USD}50,000) \\ &= 150\% \times \text{USD}575,000 \\ &= \text{USD}862,500\end{aligned}$$

Example 2: Qualifying and non-qualifying residential mortgage loan

Residential mortgage loan A amounting to USD95,000, with current value of property at USD100,000. The Labuan bank has already set aside specific provisions of USD10,000 for this loan.

Residential mortgage loan B amounting to USD75,000, with current value of property at USD100,000. The Labuan bank has already set aside specific provisions amounting to USD20,000 for this loan.

For loan A, the LTV ratio is 95%, thus would be deemed as non-qualifying. For loan B, as the LTV ratio is 75%, this category would fall under the qualifying residential mortgages loan category.

For qualifying residential mortgage loan portion:

As specific provisions over total outstanding loan amount exceeds 20% ($20,000/75,000 = 26.67\%$), the exposure would be eligible for the preferential risk weight of 50%.

$$\begin{aligned}\text{RWA} &= 50\% \times \text{outstanding amount net of specific provisions} \\ &= 50\% \times (\text{USD}75,000 - \text{USD}20,000) \\ &= 50\% \times \text{USD}55,000 \\ &= \mathbf{\text{USD}27,500}\end{aligned}$$

For non-qualifying residential mortgage loan portion:

As specific provisions over total outstanding loan amount is less than 20% ($10,000/95,000 = 10.53\%$), the exposure would be accorded a risk weight of 150%.

$$\begin{aligned}\text{RWA} &= 150\% \times \text{outstanding amount net of specific provisions} \\ &= 150\% \times (\text{USD}95,000 - \text{USD}10,000) \\ &= 150\% \times \text{USD}85,000 \\ &= \mathbf{\text{USD}127,500}\end{aligned}$$

Introduction

1. The supervisory slotting criteria method requires Labuan banks to map their internal rating to a set of supervisory criteria as per Appendix VIIa, in order to determine a supervisory category which is accorded with a specific risk weight. Once the supervisory slotting criteria method is adopted to compute credit risk-weighted asset for any or all of sub-classes under specialised lending/financing and investment, the method must be applied throughout *Istisna'*, *Mushārah* and *Mudārah* contracts consistently.
2. Labuan banks are required to fulfill the minimum requirements as set out in the following parts before they are qualified to use the supervisory slotting criteria method to derive credit risk-weighted assets for *Istisna'*, *Mushārah* and *Mudārah* contracts.

Definition of Specialised Lending/Financing and Investment

3. Specialised lending/financing and investment under the *Istisna'*, *Mushārah* and/or *Mudārah* contracts shall be divided into five subclasses, namely project finance (PF), object finance (OF), commodities finance (CF) and income-producing real estate (IPRE). In order for an exposure under these contracts to be classified as specialised lending/financing and investment, the exposures must meet the following general and specific criteria:

General Criteria

4. All specialised lending/financing and investment shall possess the following characteristics, either in legal form or economic substance:
 - i. The exposure is typically to an entity (often a special purpose entity (SPE)) which was created specifically to finance and/or operate physical assets. In specific, the SPE must have legal ownership of the assets;

- ii. The borrowing entity has little or no other material assets or activities, and therefore little or no independent capacity to repay the obligation, apart from the income that it receives from the asset(s) being financed;
- iii. The terms of the obligation give the lender a substantial degree of control over the asset(s) and the income that it generates; and
- iv. As a result of the preceding factors, the primary source of repayment of the obligation is the income generated by the asset(s), rather than the independent capacity of a broader commercial enterprise.

Specific Criteria

- 5. In addition to the four general criteria, Labuan banks are required to classify their exposures into one of the five sub-classes of specialised lending/financing based on the following broadly defined criteria:

a. Project finance

- i. Project finance (PF) is a method of funding in which Labuan banks as the lenders look primarily to the revenues generated by a single project, both as the source of repayment and as security for the exposure. This type of lending/financing is usually for large, complex and expensive installations that might include, for example, power plants, chemical processing plants, mines, transportation infrastructure, environment, and telecommunications infrastructure. Project finance may take the form of lending/financing of the construction of a new capital installation, or refinancing of an existing installation, with or without improvements.
- ii. In such transactions, the lenders are usually paid solely or almost exclusively out of the money generated by the contracts for the facility's output, such as the electricity sold by a power plant. The customer or borrower is usually an SPE that is not permitted to perform any function other than developing, owning, and operating the installation.

b. Object finance

- i. Object finance (OF) refers to a method of funding the acquisition of physical assets (for example ships, aircraft, satellites, railcars and fleets) where the repayment of the exposure is dependent on the cash flows generated by the specific assets that have been financed and pledged or assigned to the lenders. A primary source of these cash flows might be rental or lease contracts with one or several third parties.

c. Commodities finance

- i. Commodities finance (CF) refers to structured short-term lending/financing of reserves, inventories, or receivables of exchange-traded commodities (for example crude oil, metals, or crops), where the exposure will be repaid from the proceeds of the sale of the commodity and the borrower has no independent capacity to repay the exposure. This is the case when the borrower has no other activities and no other material assets on its balance sheet. The structured nature of the lending/financing is designed to compensate for the weak credit quality of the borrower. The exposure's rating reflects its self-liquidating nature and the lender's skill in structuring the transaction rather than the credit quality of the borrower.

d. Income-producing real estate

- i. Income-producing real estate (IPRE) refers to a method of providing funding to real estate (such as, office buildings to let, retail space, residential houses, multifamily residential buildings, industrial or warehouse space, and hotels) where the prospects for repayment and recovery on the exposure depend primarily on the cash flows generated by the asset. The primary source of these cash flows would generally be lease or rental payments or the sale of the asset. The borrower may be, but is not required to be, an SPE, an operating company focused on real estate construction or holdings, or an operating company with sources of revenue other than real estate. The distinguishing characteristics of IPRE

versus other corporate exposures that are collateralised by real estate is the strong positive correlation between the prospects for repayment of the exposure and the prospects for recovery in the event of default, with both depending primarily on the cash flows generated by a property.

6. Labuan banks are required to put in place comprehensive policies and procedures to facilitate the differentiation process and ensure the consistent classification of specialised lending/financing and its sub-classes.

Minimum Requirements for the Use of Supervisory Slotting Criteria

7. Labuan banks intending to adopt the supervisory slotting criteria for the computation of capital requirements for specialised lending/financing must also fulfil the following requirements:
 - a. Rating system and dimension
 - i. Labuan banks must use at least single rating dimension that reflects borrower strength and loss severity considerations.
 - b. Rating structure
 - i. The rating system must have at least four internal grades for non-defaulted borrowers, and one for defaulted borrowers.
 - c. Rating criteria
 - i. Specialised lending/financing and investment exposures must be assigned to internal rating grades based on the banks own criteria, systems and processes. The internal rating grades must then be mapped into five supervisory categories (“Strong” to “Default”) using the supervisory slotting criteria provided in **Appendix VIIa**. The mapping must be conducted separately for each sub-class of specialised financing exposures.
 - ii. Labuan FSA recognises that the criteria used by Labuan banks to assign exposures to their internal rating grades may not be perfectly

aligned with criteria that are used to define the supervisory categories. However, the mapping process must result in an alignment of the internal rating grades consistent with the predominant characteristics in the respective supervisory category. Banks should ensure that any overrides of their internal criteria do not result in the mapping process being ineffective.

- iii. Specifically, if a Labuan bank's internal rating grade maps specialised lending/financing exposure into two supervisory categories, the exposure should be assigned to the riskier supervisory category. For example, if the internal rating system produces one rating that describes criteria than can be slotted into both the supervisory "strong" and "fair" categories, the exposures should be slotted into the "fair" category.

d. Re-rating frequency and policy

- i. Labuan banks must conduct re-rating of exposures on a frequent basis and at minimum once per year. For this purpose, Labuan banks must establish written policies and procedures on re-rating, including the trigger criteria for re-rating and its frequency.

e. Data maintenance

- i. Labuan banks are expected to collect and retain the relevant data used to derive the internal rating grades, for example, data on realised losses to facilitate the future review of the specialised lending/financing portfolio.

Risk weights under Supervisory Categories

- 8. The following tables specify the risk weights for the supervisory categories of the specialised lending/financing sub-classes:

Strong	Good	Satisfactory	Weak	Default
70%	90%	115%	250%	400%

Appendix VIIa Supervisory Slotting Criteria for Specialised Lending/Financing Exposures

Project Finance Exposure

No.	Criteria	Strong	Good	Satisfactory	Weak
1.	Financial strength				
a.	Market conditions	Few competing suppliers or substantial and durable advantage in location, cost, or technology. Demand is strong and growing	Few competing suppliers or better than average location, cost, or technology but this situation may not last. Demand is strong and stable	Project has no advantage in location, cost, or technology. Demand is adequate and stable	Project has worsened than average location, cost, or technology. Demand is weak and declining
b.	Financial ratios (for example <i>debt service coverage ratio (DSCR)</i> , <i>loan life coverage ratio (LLCR)</i> , <i>project life coverage ratio (PLCR)</i> , and <i>debt-to-equity ratio</i>)	Strong financial ratios considering the level of project risk; very robust economic assumptions	Strong to acceptable financial ratios considering the level of project risk; robust project economic assumptions	Standard financial ratios considering the level of project risk	Aggressive financial ratios considering the level of project risk

No.	Criteria	Strong	Good	Satisfactory	Weak
c.	Stress analysis	The project can meet its financial obligations under sustained, severely stressed economic or sectoral conditions	The project can meet its financial obligations under normal stressed economic or sectoral conditions. The project is only likely to default under severe economic conditions	The project is vulnerable to stresses that are not uncommon through an economic cycle, and may default in a normal downturn	The project is likely to default unless conditions improve soon
d.	<i>Financial structure</i> Duration of the credit compared to the duration of the project	Useful life of the project significantly exceeds tenor of the loan	Useful life of the project exceeds tenor of the loan	Useful life of the project exceeds tenor of the loan	Useful life of the project may not exceed tenor of the loan
e.	<i>Financial structure</i> Financing repayment / investment amortisation schedule	Amortising exposure	Amortising exposure	Amortising repayments with limited bullet payment	Bullet repayment or amortising repayments with high bullet repayment
2.	Political and legal environment				
a.	Political risk, including transfer risk, considering project type and mitigants	Very low exposure; strong mitigation instruments, if needed	Low exposure; satisfactory mitigation instruments, if needed	Moderate exposure; fair mitigation instruments	High exposure; no or weak mitigation instruments
b.	Force majeure risk (war, civil unrest, etc.),	Low exposure	Acceptable exposure	Standard protection	Significant risks, not fully mitigated

No.	Criteria	Strong	Good	Satisfactory	Weak
c.	Government support and project's importance for the country over the long-term	Project of strategic importance for the country (preferably export-oriented). Strong support from Government	Project considered important for the country. Good level of support from Government	Project may not be strategic but brings unquestionable benefits for the country. Support from Government may not be explicit	Project not key to the country. No or weak support from Government
d.	Stability of legal and regulatory environment (risk of change in law)	Favourable and stable regulatory environment over the long-term	Favourable and stable regulatory environment over the medium-term	Regulatory changes can be predicted with a fair level of certainty	Current or future regulatory issues may affect the project
e.	Acquisition of all necessary supports and approvals for such relief from local content laws	Strong	Satisfactory	Fair	Weak
f.	Enforceability of contracts, collateral and security	Contracts, collateral and security are enforceable	Contracts, collateral and security are enforceable	Contracts, collateral and security are considered enforceable even if certain non-key issues may exist	There are unresolved key issues in respect if actual enforcement of contracts, collateral and security
3.	Transaction characteristics				
a.	Design and technology risk	Fully proven technology and design	Fully proven technology and design	Proven technology and design – start-up issues are mitigated by a strong completion package	Unproven technology and design; technology issues exist and/or complex design

No.	Criteria	Strong	Good	Satisfactory	Weak
b.	<i>Construction risk</i> Permitting and siting	All permits have been obtained	Some permits are still outstanding but their receipt is considered very likely	Some permits are still outstanding but the permitting process is well defined and they are considered routine	Key permits still need to be obtained and are not considered routine. Significant conditions may be attached
c.	<i>Construction risk</i> Type of construction contract	Fixed-price date-certain turnkey construction EPC (engineering and procurement contract)	Fixed-price date-certain turnkey construction EPC	Fixed-price date-certain turnkey construction contract with one or several contractors	No or partial fixed-price turnkey contract and/or interfacing issues with multiple contractors
d.	Completion guarantees	Substantial liquidated damages supported by financial substance and/or strong completion guarantee from sponsors with excellent financial standing	Significant liquidated damages supported by financial substance and/or completion guarantee from sponsors with good financial standing	Adequate liquidated damages supported by financial substance and/or completion guarantee from sponsors with good financial standing	Inadequate liquidated damages or not supported by financial substance or weak completion guarantees
e.	Track record and financial strength of contractor in constructing similar projects.	Strong	Good	Satisfactory	Weak

No.	Criteria	Strong	Good	Satisfactory	Weak
f.	<i>Operating risk</i> Scope and nature of operations and maintenance (O & M) contracts	Strong long-term O&M contract, preferably with contractual performance incentives, and/or O&M reserve accounts	Long-term O&M contract, and/or O&M reserve accounts	Limited O&M contract or O&M reserve account	No O&M contract: risk of high operational cost overruns beyond mitigants
g.	<i>Operating risk</i> Operator's expertise, track record, and financial strength	Very strong, or committed technical assistance of the sponsors	Strong	Acceptable	Limited/weak, or local operator dependent on local
h.	<i>Off-take risk</i> If there is a take-or-pay or fixed-price off-take contract:	Excellent creditworthiness of off-taker; strong termination clauses; tenor of contract comfortably exceeds the maturity of the debt	Good creditworthiness of off-taker; strong termination clauses; tenor of contract exceeds the maturity of the debt	Acceptable financial standing of off-taker; normal termination clauses; tenor of contract generally matches the maturity of the debt	Weak off-taker; weak termination clauses; tenor of contract does not exceed the maturity of the debt

No.	Criteria	Strong	Good	Satisfactory	Weak
i.	<i>Off-take risk</i> If there is no take-or-pay or fixed-price off-take contract:	Project produces essential services or a commodity sold widely on a world market; output can readily be absorbed at projected prices even at lower than historic market growth rates	Project produces essential services or a commodity sold widely on a regional market that will absorb it at projected prices at historical growth rates	Commodity is sold on a limited market that may absorb it only at lower than projected prices	Project output is demanded by only one or a few buyers or is not generally sold on an organised market
j.	<i>Supply risk</i> Price, volume and transportation risk of feed-stocks; supplier's track record and financial strength	Long-term supply contract with supplier of excellent financial standing	Long-term supply contract with supplier of good financial standing	Long-term supply contract with supplier of good financial standing – a degree of price risk may remain	Short-term supply contract or long-term supply contract with financially weak supplier – a degree of price risk definitely remains
k.	<i>Supply risk</i> Reserve risks (for example natural resource development)	Independently audited, proven and developed reserves well in excess of requirements over lifetime of the project	Independently audited, proven and developed reserves in excess of requirements over lifetime of the project	Proven reserves can supply the project adequately through the maturity of the debt	Project relies to some extent on potential and undeveloped reserves

No.	Criteria	Strong	Good	Satisfactory	Weak
4.	Strength of Sponsor				
a.	Sponsor's track record, financial strength, and country/sector experience	Strong sponsor with excellent track record and high financial standing	Good sponsor with satisfactory track record and good financial standing	Adequate sponsor with adequate track record and good financial standing	Weak sponsor with no or questionable track record and/or financial weaknesses
b.	Sponsor support, as evidenced by equity, ownership clause and incentive to inject additional cash if necessary	Strong. Project is highly strategic for the sponsor (core business – long-term strategy)	Good. Project is strategic for the sponsor (core business – long-term strategy)	Acceptable. Project is considered important for the sponsor (core business)	Limited. Project is not key to sponsor's long-term strategy or core business
5.	Security Package				
a.	Assignment of contracts and accounts	Fully comprehensive	Comprehensive	Satisfactory	Weak
b.	Pledge of assets, taking into account quality, value and liquidity of assets	First perfected security interest in all project assets, contracts, permits and accounts necessary to run the Project	Perfected security interest in all project assets, contracts, permits and accounts necessary to run the project	Acceptable security interest in all project assets, contracts, permits and accounts necessary to run the project	Little security or collateral for lenders; weak negative pledge clause
c.	Lender's control over cash flow (for example cash sweeps, independent escrow accounts)	Strong	Satisfactory	Fair	Weak

No.	Criteria	Strong	Good	Satisfactory	Weak
d.	Strength of the covenant package (mandatory prepayments, payment deferrals, payment cascade, dividend restrictions)	Covenant package is strong for this type of project. Project may issue no additional debt	Covenant package is satisfactory for this type of project. Project may issue extremely limited additional debt	Covenant package is fair for this type of project. Project may issue limited additional debt	Covenant package is Insufficient for this type of project. Project may issue unlimited additional debt
e.	Reserve funds (debt service, O&M, renewal and replacement, unforeseen events, etc)	Longer than average coverage period, all reserve funds fully funded in cash or letters of credit from highly rated bank	Average coverage period, all reserve funds fully funded	Average coverage period, all reserve funds fully funded	Shorter than average coverage period, reserve funds funded from operating cash flows

Income-Producing Real Estate

No.	Criteria	Strong	Good	Satisfactory	Weak
1.	Financial strength				
a.	Market conditions	The supply and demand for the project's type and location are currently in equilibrium. The number of competitive properties coming to market is equal or lower than forecasted demand	The supply and demand for the project's type and location are currently in equilibrium. The number of competitive properties coming to market is roughly equal to forecasted demand	Market conditions are roughly in equilibrium. Competitive properties are coming on the market and others are in the planning stages. The project's design and capabilities may not be state of the art compared to new projects	Market conditions are weak. It is uncertain when conditions will improve and return to equilibrium. The project is losing tenants at lease expiration. New lease terms are less favourable compared to those expiring

No.	Criteria	Strong	Good	Satisfactory	Weak
b.	Financial ratios and advance rate	The property's debt service coverage ratio (DSCR) is considered strong (DSCR is not relevant for the construction phase) and its loan-to-value ratio is considered low given its property type. Where a secondary market exists, the transaction is underwritten to market standards	The DSCR (not relevant for development real estate) and loan-to-value are satisfactory. Where a secondary market exists, the transaction is underwritten to market standards	The property's DSCR has deteriorated and its value has fallen, increasing its loan-to-value	The property's DSCR has deteriorated significantly and its loan-to-value is well above underwriting standards for new loans
c.	Stress analysis	The property's resources, contingencies and liability structure allow it to meet its financial obligations during a period of severe financial stress (for example interest rates, economic growth)	The property can meet its financial obligations under a sustained period of financial stress (for example interest rates, economic growth). The property is likely to default only under severe economic conditions	During an economic downturn, the property would suffer a decline in revenue that would limit its ability to fund capital expenditures and significantly increase the risk of default	The property's financial condition is strained and is likely to default unless conditions improve in the near term

No.	Criteria	Strong	Good	Satisfactory	Weak
d.	<i>Cash-flow predictability</i> (a) For complete and stabilised property.	The property's leases are long-term with creditworthy tenants and their maturity dates are scattered. The property has a track record of tenant retention upon lease expiration. Its vacancy rate is low. Expenses (maintenance, insurance, security, and property taxes) are predictable	Most of the property's leases are long-term, with tenants that range in creditworthiness. The property experiences a normal level of tenant turnover upon lease expiration. Its vacancy rate is low. Expenses are predictable	Most of the property's leases are medium rather than long-term with tenants that range in creditworthiness. The property experiences a moderate level of tenant turnover upon lease expiration. Its vacancy rate is moderate. Expenses are relatively predictable but vary in relation to revenue	The property's leases are of various terms with tenants that range in creditworthiness. The property experiences a very high level of tenant turnover upon lease expiration. Its vacancy rate is high. Significant expenses are incurred preparing space for new tenants
e.	<i>Cash-flow predictability</i> (b) For complete but not stabilised property	Leasing activity meets or exceeds projections. The project should achieve stabilisation in the near future	Leasing activity meets or exceeds projections. The project should achieve stabilisation in the near future	Most leasing activity is within projections; however, stabilisation will not occur for some time	Market rents do not meet expectations. Despite achieving target occupancy rate, cash flow coverage is tight due to disappointing revenue

No.	Criteria	Strong	Good	Satisfactory	Weak
f.	<i>Cash-flow predictability</i> (c) For construction phase	The property is entirely pre-leased through the tenor of the loan or pre-sold to an investment grade tenant or buyer, or the bank has a binding commitment for take-out financing from an investment grade lender	The property is entirely pre-leased or pre-sold to a creditworthy tenant or buyer, or the bank has a binding commitment for permanent financing from a creditworthy lender	Leasing activity is within projections but the building may not be pre- leased and there may not exist a takeout financing. The bank may be the permanent lender	The property is deteriorating due to cost overruns, market deterioration, tenant cancellations or other factors. There may be a dispute with the party providing the permanent financing
2.	Asset characteristics				
a.	Location	Property is located in highly desirable location that is convenient to services that tenants desire	Property is located in desirable location that is convenient to services that tenants desire	The property location lacks a competitive advantage	The property's location, configuration, design and maintenance have contributed to the property's difficulties
b.	Design and condition	Property is favoured due to its design, configuration, and maintenance, and is highly competitive with new properties	Property is appropriate in terms of its design, configuration and maintenance. The property's design and capabilities are competitive with new properties	Property is adequate in terms of its configuration, design and maintenance	Weaknesses exist in the property's configuration, design or maintenance

No.	Criteria	Strong	Good	Satisfactory	Weak
c.	Property is under construction	Construction budget is conservative and technical hazards are limited. Contractors are highly qualified	Construction budget is conservative and technical hazards are limited. Contractors are highly qualified	Construction budget is adequate and contractors are ordinarily qualified	Project is over budget or unrealistic given its technical hazards. Contractors may be under qualified
3.	Strength of Sponsor/Developer				
a.	Financial capacity and willingness to support the property.	The sponsor /developer made a substantial cash contribution to the construction or purchase of the property. The sponsor/developer has substantial resources and limited direct and contingent liabilities. The sponsor/developer's properties are diversified geographically and by property type	The sponsor /developer made a material cash contribution to the construction or purchase of the property. The sponsor/developer's financial condition allows it to support the property in the event of a cash flow shortfall. The sponsor/developer's properties are located in several geographic regions	The sponsor /developer's contribution may be immaterial or non- cash. The sponsor/developer is average to below average in financial resources	The sponsor /developer lacks capacity or willingness to support the property

No.	Criteria	Strong	Good	Satisfactory	Weak
b.	Reputation and track record with similar properties.	Experienced management and high sponsors' quality. Strong reputation and lengthy and successful record with similar properties	Appropriate management and sponsors' quality. The sponsor or management has a successful record with similar properties	Moderate management and sponsors' quality. Management or sponsor track record does not raise serious concerns	Ineffective management and substandard sponsors' quality. Management and sponsor difficulties have contributed to difficulties in managing properties in the past
c.	Relationships with relevant real estate actors	Strong relationships with leading actors such as leasing agents	Proven relationships with leading actors such as leasing agents	Adequate relationships with leasing agents and other parties providing important real estate services	Poor relationships with leasing agents and/or other parties providing important real estate services
4.	Security Package				
a.	Nature of lien	Perfected first lien	Perfected first lien	Perfected first lien	Ability of lender to foreclose is constrained

No.	Criteria	Strong	Good	Satisfactory	Weak
b.	Assignment of rents (for projects leased to long-term tenants)	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to remit rents directly to the lender, such as a current rent roll and copies of the project's leases	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to the tenants to remit rents directly to the lender, such as current rent roll and copies of the project's leases	The lender has obtained an assignment. They maintain current tenant information that would facilitate providing notice to the tenants to remit rents directly to the lender, such as current rent roll and copies of the project's leases	The lender has not obtained an assignment of the leases or has not maintained the information necessary to readily provide notice to the building's tenants
c.	Quality of the insurance coverage	Appropriate	Appropriate	Appropriate	Substandard

Object Finance Exposure

No.	Criteria	Strong	Good	Satisfactory	Weak
1.	Financial strength				
a.	Market conditions	Demand is strong and growing, strong entry barriers, low sensitivity to changes in technology and economic outlook	Demand is strong and stable. Some entry barriers, some sensitivity to changes in technology and economic outlook	Demand is adequate and stable, limited entry barriers, significant sensitivity to changes in technology and economic outlook	Demand is weak and declining, vulnerable to changes in technology and economic outlook, highly uncertain environment
b.	Financial ratios (debt service coverage ratio and loan-to-value ratio)	Strong financial ratios considering the type of asset. Very robust economic assumptions	Strong / acceptable financial ratios considering the type of asset. Robust project economic assumptions	Standard financial ratios for the asset type	Aggressive financial ratios considering the type of asset
c.	Stress analysis	Stable long-term revenues, capable of withstanding severely stressed conditions through an economic cycle	Satisfactory short-term revenues. Loan can withstand some financial adversity. Default is only likely under severe economic conditions	Uncertain short-term revenues. Cash flows are vulnerable to stresses that are not uncommon through an economic cycle. The loan may default in a normal downturn	Revenues subject to strong uncertainties; even in normal economic conditions the asset may default, unless conditions improve

No.	Criteria	Strong	Good	Satisfactory	Weak
d.	Market liquidity	Market is structured on a worldwide basis; assets are highly liquid	Market is worldwide or regional; assets are relatively liquid	Market is regional with limited prospects in the short term, implying lower liquidity	Local market and/or poor visibility. Low or no liquidity, particularly on niche markets
2.	Political and legal environment				
a.	Political risk, including transfer risk	Very low; strong mitigation instruments, if needed	Low; satisfactory mitigation instruments, if needed	Moderate; fair mitigation instruments	High; no or weak mitigation instruments
b.	Legal and regulatory risks	Jurisdiction is favourable to repossession and enforcement of contracts	Jurisdiction is favourable to repossession and enforcement of contracts	Jurisdiction is generally favourable to repossession and enforcement of contracts, even if repossession might be long and/or difficult	Poor or unstable legal and regulatory environment. Jurisdiction may make repossession and enforcement of contracts lengthy or impossible
3.	Transaction characteristics				
a.	Financing term compared to the economic life of the asset	Full payout profile/minimum balloon. No grace period	Balloon more significant, but still at satisfactory levels	Important balloon with potentially grace periods	Repayment in fine or high balloon

No.	Criteria	Strong	Good	Satisfactory	Weak
4.	Operating risk				
a.	Permits / licensing	All permits have been obtained; asset meets current and foreseeable safety regulations	All permits obtained or in the process of being obtained; asset meets current and foreseeable safety regulations	Most permits obtained or in process of being obtained, outstanding ones considered routine, asset meets current safety regulations	Problems in obtaining all required permits, part of the planned configuration and/or planned operations might need to be revised
b.	Scope and nature of O & M contracts	Strong long-term O&M contract, preferably with contractual performance incentives, and/or O&M reserve accounts (if needed)	Long-term O&M contract, and/or O&M reserve accounts (if needed)	Limited O&M contract or O&M reserve account (if needed)	No O&M contract: risk of high operational cost overruns beyond mitigants
c.	Operator's financial strength, track record in managing the asset type and capability to re-market asset when it comes off-lease	Excellent track record and strong re-marketing capability	Satisfactory track record and re-marketing capability	Weak or short track record and uncertain re-marketing capability	No or unknown track record and inability to re-market the asset

No.	Criteria	Strong	Good	Satisfactory	Weak
5.	Asset characteristics				
a.	Configuration, size, design and maintenance (i.e. age, size for a plane) compared to other assets on the same market	Strong advantage in design and maintenance. Configuration is standard such that the object meets a liquid market	Above average design and maintenance. Standard configuration, maybe with very limited exceptions - such that the object meets a liquid market	Average design and maintenance. Configuration is somewhat specific, and thus might cause a narrower market for the object	Below average design and maintenance. Asset is near the end of its economic life. Configuration is very specific; the market for the object is very narrow
b.	Resale value	Current resale value is well above debt value	Resale value is moderately above debt value	Resale value is slightly above debt value	Resale value is below debt value
c.	Sensitivity of the asset value and liquidity to economic cycles	Asset value and liquidity are relatively insensitive to economic cycles	Asset value and liquidity are sensitive to economic cycles	Asset value and liquidity are quite sensitive to economic cycles	Asset value and liquidity are highly sensitive to economic cycles
6.	Strength of sponsor				
a.	Operator's financial strength, track record in managing the asset type and capability to re-market asset when it comes off-lease	Excellent track record and strong re-marketing capability	Satisfactory track record and re-marketing capability	Weak or short track record and uncertain re-marketing capability	No or unknown track record and inability to remarket the asset

No.	Criteria	Strong	Good	Satisfactory	Weak
b.	Sponsors' track record and financial strength	Sponsors with excellent track record and high financial standing	Sponsors with good track record and good financial standing	Sponsors with adequate track record and good financial standing	Sponsors with no or questionable track record and/or financial weaknesses
7.	Security Package				
a.	Asset control	Legal documentation provides the lender effective control (for example a first perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it	Legal documentation provides the lender effective control (for example a perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it	Legal documentation provides the lender effective control (for example a perfected security interest, or a leasing structure including such security) on the asset, or on the company owning it	The contract provides little security to the lender and leaves room to some risk of losing control on the asset
b.	Rights and means at the lender's disposal to monitor the location and condition of the asset	The lender is able to monitor the location and condition of the asset, at any time and place (regular reports, possibility to lead inspections)	The lender is able to monitor the location and condition of the asset, almost at any time and place	The lender is able to monitor the location and condition of the asset, almost at any time and place	The lender is able to monitor the location and condition of the asset are limited

No.	Criteria	Strong	Good	Satisfactory	Weak
c.	Insurance against damages	Strong insurance coverage including collateral damages with top quality insurance companies	Satisfactory insurance coverage (not including collateral damages) with good quality insurance companies	Fair insurance coverage (not including collateral damages) with acceptable quality insurance companies	Weak insurance coverage (not including collateral damages) or with weak quality insurance companies

Commodities Finance Exposures

No.	Criteria	Strong	Good	Satisfactory	Weak
1.	Financial strength				
a.	Degree of over collateralisation of trade	Strong	Good	Satisfactory	Weak
2.	Political and legal environment				
a.	Country risk	No country risk	Limited exposure to country risk (in particular, offshore location of reserves in an emerging country)	Exposure to country risk (in particular, offshore location of reserves in an emerging country)	Strong exposure to country risk (in particular, inland reserves in an emerging country)
b.	Mitigation of country risks	Very strong mitigation: Strong offshore mechanisms, strategic commodity buyer	Strong mitigation: Offshore mechanisms, strategic commodity, strong buyer	Acceptable mitigation: Offshore mechanisms, less strategic commodity, acceptable buyer	Only partial mitigation: No offshore mechanisms, non-strategic commodity, weak buyer

No.	Criteria	Strong	Good	Satisfactory	Weak
3.	Asset characteristics				
a.	Liquidity and susceptibility to damage	Commodity is quoted and can be hedged through futures or OTC instruments. Commodity is not susceptible to damage	Commodity is quoted and can be hedged through OTC instruments. Commodity is not susceptible to damage	Commodity is not quoted but is liquid. There is uncertainty about the possibility of hedging. Commodity is not susceptible to damage	Commodity is not quoted. Liquidity is limited given the size and depth of the market. No appropriate hedging instruments. Commodity is susceptible to damage
4.	Strength of Sponsor				
a.	Financial strength of trader	Very strong, relative to trading philosophy and risks	Strong	Adequate	Weak
b.	Track record, including ability to manage the logistic process	Extensive experience with the type of transaction in question. Strong record of operating success and cost efficiency	Sufficient experience with the type of transaction in question. Above average record of operating success and cost efficiency	Limited experience with the type of transaction in question. Average record of operating success and cost efficiency	Limited or uncertain track record in general. Volatile costs and profits

No.	Criteria	Strong	Good	Satisfactory	Weak
c.	Trading controls and hedging policies	Strong standards for counterparty selection, hedging, and monitoring	Adequate standards for counterparty selection, hedging, and monitoring	Past deals have experienced no or minor problems	Trader has experienced significant losses on past deals
d.	Quality of financial disclosure	Excellent	Good	Satisfactory	Financial disclosure contains some uncertainties or is insufficient
5.	Security Package				
a.	Asset control	First perfected security interest provides the lender legal control of the assets at any time if needed	First perfected security interest provides the lender legal control of the assets at any time if needed	At some point in the process, there is a rupture in the control of the assets by the lender. The rupture is mitigated by knowledge of the trade process or a third party undertaking as the case may be	Contract leaves room for some risk of losing control over the assets. Recovery could be jeopardized
b.	Insurance against damages	Strong insurance coverage including collateral damages with top quality insurance companies	Satisfactory insurance coverage (not including collateral damages) with good quality insurance companies	Fair insurance coverage (not including collateral damages) with acceptable quality insurance companies	Weak insurance coverage (not including collateral damages) or with weak quality insurance companies

Counterparty Credit Risk

1. Counterparty Credit Risk (CCR) is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default. Unlike a firm's exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, CCR creates a bilateral risk of loss: the market value of the transaction can be positive or negative to either counterparty to the transaction. The market value is uncertain and can vary over time with the movement of underlying market factors.
2. The method for computing the exposure amount under the standardised approach for credit risk described in this appendix is applicable to over-the-counter (OTC) derivatives as well as to the securities financing transactions (SFTs). Such positions or transactions would generally exhibit the following characteristics:
 - i. Undertaken with an identified counterparty against which a unique probability of default can be determined.
 - ii. Generate an exchange of payments or an exchange of a financial instrument (including commodities) against payment.
 - iii. Generate a current exposure or market value.
 - iv. Have an associated random future market value based on market variables.
3. Other common characteristics of these transactions may include the following:
 - i. Short-term financing may be a primary objective in that the transactions mostly consist of an exchange of one asset for another (cash or securities) for a relatively short period of time, usually for the business purpose of financing. The two sides of the transactions are not the result of separate decisions but form an invisible whole to accomplish a defined objective.

- ii. Positions are frequently valued (most commonly on a daily basis), according to market variables.
 - iii. Uses of credit risk mitigant such as collateralisation¹³⁷, netting and re-margining to mitigate risk.
4. An exposure value (or EAD) of zero for counterparty credit risk can be attributed to derivative contracts or SFTs that are outstanding with a central counterparty (for example a clearing house). This does not apply to counterparty credit risk exposures from derivative transactions and SFTs that have been rejected by the central counterparty. Furthermore, an exposure value (EAD) of zero can be attributed to Labuan banks' credit risk exposures¹³⁸ to central counterparties that result from the derivative transactions, SFTs or spot transactions that the bank has outstanding with the central counterparty. Assets held by a central counterparty as a custodian on the Labuan bank's behalf would not be subject to a capital requirement for counterparty credit risk exposures.
5. A central counterparty is an entity that interposes itself between counterparties to contracts traded within one or more financial markets, becoming the legal counterparty such that it is the buyer to every seller and the seller to every buyer. In order to qualify for the above exemptions, the central counterparty CCR exposures with all participants in its arrangements must be fully collateralised on a daily basis, thereby providing protection for the central counterparty's CCR exposures.
6. When a Labuan bank purchases credit derivative protection against a banking book exposure, or against a counterparty credit risk exposure, it will determine its capital requirement for the hedged exposure subject to the criteria and general rules for the recognition of credit derivatives as per the substitution rules in Part B.2.5. Where this rule applies, the exposure amount for counterparty credit risk from such transactions is zero.

¹³⁷ Collateralisation may be inherent in the nature of some transactions.

¹³⁸ Example, from clearing deposits and collateral posted with the central counterparty.

7. The exposure amount for counterparty credit risk is zero for sold credit default swaps in the banking book where the exposures are treated in the guidelines as a guarantee provided by the Labuan bank and subject to a credit risk charge based on the full notional amount.
8. Under the current exposure method, the exposure amount for a given counterparty is equal to the sum of the exposure amounts calculated for each netting set¹³⁹ with that counterparty.

The Current Exposure Method

9. The current exposure method is to be applied to OTC derivative positions only, to determine the credit equivalent amount (or EAD) for these transactions for purposes of the capital adequacy calculation. SFTs (which include transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing and margin lending transactions, where the value of the transactions depends on market valuations and the transactions are often subject to margin agreements), shall be subject to the treatment set out under Part B.2.5 of this framework;
10. For the OTC derivatives contracts Labuan banks are not exposed to credit risk for the full face value of the derivatives contracts, but only to the potential cost of replacing the cash-flow if the counterparty defaults. As such, the credit equivalent amount will depend, inter alia, on the maturity of the contract and on the volatility of the rates underlying that type of instrument.

¹³⁹ A netting set is a group of transactions with a single counterparty that are subject to a legally enforceable bilateral netting arrangement and for which netting is recognised for regulatory capital purposes under the provisions of paragraphs 19 to 24 of this appendix and **Part B.3.4**. Each transaction not subject to a legally enforceable bilateral netting arrangement that is recognised for regulatory capital purposes should be treated as its own netting set (separate from those whose bilateral netting arrangement is recognised for regulatory capital purposes).

11. Under the current exposure method, the computation of the credit equivalent exposure for derivatives contracts is based on the summation of the following two elements :
- i. The replacement costs (obtained by marking-to-market) of all contracts with positive value (zero for contracts with negative replacement costs); and
 - ii. The amount of potential future exposure is calculated by multiplying the notional value of each contract by an “add-on” factor.

$$\text{Credit exposure} = \text{positive MTM} + (\text{NP} \times \text{“add-on” factor (\%)})$$

Where:

MTM = Mark-to-Market

NP = Notional principal

Add-on factor = As per **Appendix VIIIb**

(An illustration of the calculation under the current exposure method is given in **Appendix VIIla**)

12. The “add-on” factors in computing the potential future exposure is determined based on the type of exposure and the residual maturity of each contracts. The “add-on” factors for derivatives contracts are listed in **Appendix VIIIb**.
13. The credit equivalent amounts of exchange rate and interest rate contracts are to be risk-weighted according to the category of the counterparty, including the use of concessionary weightings in respect of exposures backed by eligible guarantees and collateral. Nevertheless, Labuan FSA reserves the right to raise the risk weights if the average credit quality deteriorates or if loss experience increases.
14. Labuan banks can obtain capital relief for collateral eligible as defined under the comprehensive approach of this framework subject to the same operational requirements.

15. The calculation of the exposure for an individual contract for a collateralised OTC derivatives transaction¹⁴⁰ will be as follows:

$$\text{Credit exposure} = \text{positive MTM} + (\text{NP} \times \text{"add-on factor"}(\%)) - \text{CA}$$

Where:

MTM	= Mark-to-Market
NP	= Notional principal
Add-on factor	= As per Appendix VIIb
CA	= Volatility-adjusted collateral amount under the comprehensive approach

16. When effective bilateral netting contracts are in place in a collateralised OTC derivative transaction, MTM will be the net replacement cost and the add-on will be A_{Net} as calculated above. The haircut for currency risk (H_{FX}) should be applied when there is a mismatch between the collateral currency and the settlement currency. Even in the case where there are more than two currencies involved in the exposure, collateral and settlement currency, a single haircut assuming a 10-business day holding period scaled up as necessary depending on the frequency of mark-to-market will be applied.
17. Counterparty credit risk exposure amount for single name credit derivative transactions in the trading book will be calculated using the potential future exposure "add-on" factors set out in the market risk component of this framework.
18. Where a credit derivative is an N^{th} to default transaction (such as a first to default transaction) the treatment specified in market risk component of this framework applies.

¹⁴⁰ For example, collateralised interest rate swap transactions.

Bilateral Netting

19. Bilateral netting involves weighting of the net rather than the gross claims with the same counterparties arising out of the full range of forwards, swaps, options and similar derivative contracts. Careful consideration needs to be given to ensure that there is no reduction in counterparty risk, especially in cases if a liquidator of a failed counterparty has (or may have) the right to unbundle netted contracts, demanding performance on those contracts favourable to the failed counterparty and defaulting on unfavourable contracts.
20. Therefore, for capital adequacy purposes, bilateral netting¹⁴¹ may be conducted only under the following circumstances:
 - i. Labuan banks may net transactions subject to novation under which any obligation between a Labuan bank and its counterparty to deliver a given currency on a given value date is automatically amalgamated with all other obligations for the same currency and value date, legally substituting one single amount for the previous gross obligations; or
 - ii. Labuan bank may also net transactions subject to any legally valid form of bilateral netting not covered above, including other forms of novation.
21. In both cases above, a Labuan bank will need to satisfy Labuan FSA that it has:
 - i. A netting contract or agreement with the counterparty which creates a single legal obligation, covering all included transactions, such that the bank would have either a claim to receive or obligation to pay only the net sum of the positive and negative mark to market values of included individual transactions in the event a counterparty fails to perform due to any of the following: default, bankruptcy, liquidation or similar circumstances;
 - ii. Written and reasoned legal opinions that, in the event of a legal challenge, the relevant courts and administrative authorities would find the Labuan bank's

¹⁴¹ Payments netting, which is designed to reduce the operational costs of daily settlements, will not be recognised in this framework since the counterparty's gross obligations are not in any way affected.

exposure to be such a net amount under:

- a. The law of the jurisdiction in which the counterparty is chartered and, if the foreign branch of a counterparty is involved, then also under the law of the jurisdiction in which the branch is located;
- b. The law that governs the individual transactions; and
- c. The law that governs any contract or agreement necessary to effect the netting.

Labuan FSA will have to be satisfied that the netting is enforceable under the laws of each of the relevant jurisdictions¹⁴²,

- iii. Procedures in place to ensure that the legal characteristics of netting arrangements are kept under review in the light of possible changes in relevant law.
22. Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating capital requirements. A walkaway clause is a provision which permits a non defaulting counterparty to make only limited payments or no payment at all to the estate of a defaulter, even if the defaulter is a net creditor.
23. Credit exposure on bilaterally netted forward transactions will be calculated as the sum of the net mark to market replacement cost, if positive, plus an “add-on” based on the notional underlying principal. The “add-on” for netted transactions (ANet) will equal the weighted average of the gross “add-on” (AGross)¹⁴³ and the gross “add-on” adjusted by the ratio of net current replacement cost to gross current replacement cost (NGR). This is expressed through the following formula:

¹⁴² If Labuan FSA and other national supervisors are dissatisfied about the enforceability under the laws, the netting contract or agreement will not meet this condition and neither counterparty could obtain supervisory benefit.

¹⁴³ A Gross equals the sum of individual add on amounts (calculated by multiplying the notional principal amount by the appropriate add on factors set out in paragraph 11 of this appendix) of all transactions subject to legally enforceable netting agreements with one counterparty.

$$ANet = 0.4 * AGross + 0.6 * NGR * AGross$$

Where:

NGR = level of net replacement cost/level of gross replacement cost for transactions subject to legally enforceable netting agreements¹⁴⁴

24. The scale of the gross “add-ons” to apply in this formula will be the same as those for non netted transactions as set out in paragraphs 9 to 18 of this appendix. Labuan FSA will continue to review the scale of “add-ons” to make sure they are appropriate. For purposes of calculating potential future credit exposure to a netting counterparty for forward foreign exchange contracts and other similar contracts in which notional principal is equivalent to cash flows, notional principal is defined as the net receipts falling due on each value date in each currency. The reason for this is that offsetting contracts in the same currency maturing on the same date will have lower potential future exposure as well as lower current exposure.

¹⁴⁴ A_{gross} equals the sum of individual add-on amounts (calculated by multiplying the notional principal amount by the appropriate add-on factors)

Appendix VIIIa Sample Computation of the Capital Requirement and Exposure at Default (EAD) for a portfolio of Derivative Contracts

Transaction I

Type of instrument : 8 Year Fixed-to-floating Cross Currency Interest Rate Swap (CCIRS)
 Notional principal amount : USD1,000,000
 Current date of report : 31 December 1997
 Maturity date : 31 December 2000
 Remaining maturity : 3 years
 Replacement cost : USD350,000 (+ve)

Transaction II

Type of instrument : 6 Year Fixed-to-floating Interest Rate Swap (IRS)
 Notional principal amount : USD1,000,000
 Current date of report : 31 December 1997
 Maturity date : 31 December 2002
 Remaining maturity : 5 years
 Replacement cost : USD200,000 (-ve)

Type of instrument	CCIRS	IRS	Total
Credit equivalent exposure (exposure at default) = positive replacement cost + potential future exposure	$350,000 + \{1,000,000 \times (2\% + 7\%)\}$ $= 350,000 + 90,000$ $= 440,000$	$0 + \{1,000,000 \times (4\%)\}$ $= 0 + 40,000$ $= 40,000$	480,000
Risk-weighted asset (assume risk weight of 50%)	$440,000 \times 50\%$ $= 220,000$	$40,000 \times 50\%$ $= 20,000$	240,000
Capital requirement (8%)	$220,000 \times 8\%$ $= 17,600$	$20,000 \times 8\%$ $= 1,600$	19,200

Appendix VIIIb “Add-on” Factors for Derivatives Contracts**Schedule 1**

“Add-on” factors for derivative contracts with interest rate exposures

Residual maturity	Factor (%)
< 14 calendar days	Nil
> 14 calendar days and < 6 months	0.10%
> 6 months and < 1 year	0.25%
> 1 year and < 2 years	1.0%
> 2 year and < 3 years	2.0%
> 3 year and < 4 years	3.0%
> 4 year and < 5 years	4.0%
> 5 year and < 6 years	5.0%
> 6 year and < 7 years	6.0%
for each additional year	add 1.0%

Schedule 2

“Add-on” factors for derivative contracts with foreign exchange exposures

Residual maturity	Factor (%)
< 14 calendar days	Nil
> 14 calendar days and < 6 months	1.5%
> 6 months and < 1 year	3.0%
> 1 year and < 2 years	5.0%
> 2 year and < 3 years	7.0%
> 3 year and < 4 years	8.0%
> 4 year and < 5 years	9.0%
> 5 year and < 6 years	10.0%
> 6 year and < 10 years	11.0%
> 10 years	12.0%

Schedule 3

“Add-on” factors for other types of contracts

	Gold	Equities	Precious Metals Except Gold	Other Commodities
One year or less	1.0%	6.0%	7.0%	10.0%
Over one year to five years	5.0%	8.0%	7.0%	12.0%
Over five years	7.5%	10.0%	8.0%	15.0%

Notes: Forwards, swaps, purchased options and similar derivative contracts not covered by any of the columns of this matrix are to be treated as ‘other commodities’

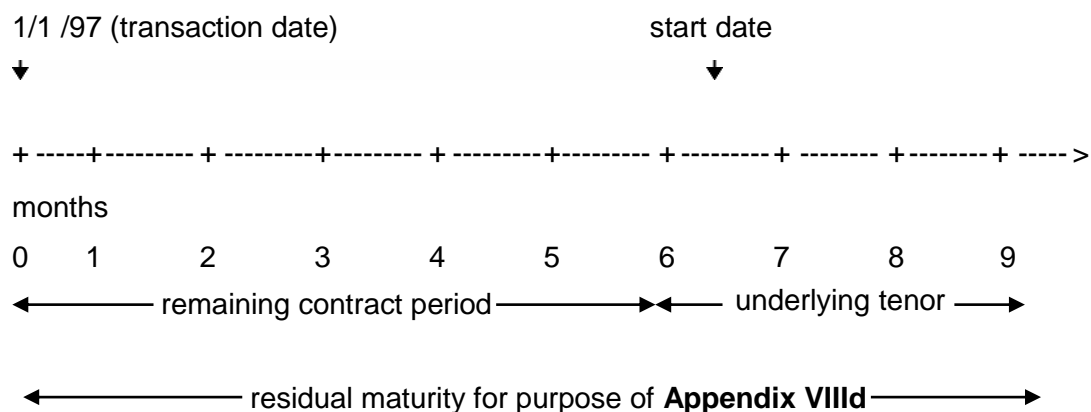
Additional notes “add-on” factors:

- i. For derivative contracts which are sensitive to movements in more than one type of rates, the “add-on” factors used will be the summation of the “add-on” factors for the various types of exposures according to the relevant residual maturity bucket;
- ii. For contracts with multiple exchanges of principal, the notional principal amount is the sum of the remaining exchanges of principal. This shall represent the amount to be multiplied with the “add-on” factors;
- iii. For both forward rate agreements and over-the-counter interest rate contracts of similar nature which are settled in cash on start date, residual maturity is measured as the sum of the remaining contract period and the underlying tenor of the contract (An illustration is provided in **Appendix VIIIc**). Institutions may choose to apply discounts to the “add-on” factors if the remaining contract period, as a fraction of residual maturity, falls within a certain range (please refer to **Appendix VIId**) for the discount factor and range of residual maturity.
- iv. For single currency floating-to-floating interest rate swaps, the “add-on” factor is zero. Thus, the credit exposure for such contracts will comprise only the positive mark-to-market value;

- v. For contracts that are structured to settle outstanding exposure following specified payment dates and where the terms are reset such that the market value of the contract is zero on these specified dates, the residual maturity would be set equal to the time until the next reset date. In the case of interest rate contracts with remaining maturities of more than one year that meet the above criteria, the “add-on” factor is subject to a floor of 0.5%.
- vi. The “add-ons” should be based on effective rather than notional amounts. In the event that the stated notional amount is leveraged or enhanced by the structure of the transaction, Labuan banks must use the effective notional amount when determining potential future exposure.

Appendix VIIIc Example for Calculation of Residual Maturity (for Forward Rate Agreements and Over-The-Counter Interest Rate Contracts of Similar Nature which are Settled in Cash on Start Date)

A 3-month forward rate agreement for delivery in June 1997



Appendix VIII d Discount Factor and Range of Residual Maturity

t = Remaining contract period Residual maturity	Discount to “Add-on” Factor
$t < 0.01$	75%
$0.01 < t < 0.05$	50%
$0.05 < t < 0.10$	25%
$0.10 < t < 0.65$	no discount
$0.65 < t < 0.80$	25%
$0.80 < t < 0.90$	50%
$t \geq 0.90$	75%

Appendix IX Capital Treatment for Failed Trades and Non-DvP Transactions

1. The capital treatment specified in this appendix is applicable to all transactions¹⁴⁵ on securities, foreign exchange instruments and commodities that give rise to a risk of delayed settlement or delivery. This may include transactions through recognised clearing houses that are subject to daily mark-to-market and payment of daily variation margins and that involve a mismatched trade.
2. Transactions on securities, foreign exchange contracts or commodities may be settled via the following:
 - i. delivery-versus-payment system (DvP)¹⁴⁶, which provides simultaneous exchanges of securities for cash, hence exposing Labuan banks to a risk of loss on the difference between the transaction valued at the agreed settlement price and the transaction valued at current market price (i.e. positive current exposure); or
 - ii. non-DvP or free-delivery system, whereby cash is paid without receipt of the corresponding receivable (securities, foreign currencies, gold, or commodities) or, conversely, deliverables were delivered without receipt of the corresponding cash payment, hence exposing Labuan banks to a risk of loss on the full amount of cash paid or deliverables delivered.
3. Labuan FSA may use its discretion to waive capital charges in cases of a system wide failure of a settlement or clearing system, until the situation is rectified. Failure by a counterparty to settle a trade in itself will not be deemed a default for purposes of credit risk under this framework.

¹⁴⁵ All repurchase and reverse-repurchase agreements as well as securities lending and borrowing, including those that have failed to settle, are treated in accordance with the parts on credit risk mitigation of this framework.

¹⁴⁶ For the purpose of this framework, DvP transactions include payment-versus-payment (PvP) transactions.

Capital Requirements (for other than equities)

4. For DvP transactions, if the payments have not yet taken place five business days after the settlement date, Labuan banks must calculate a capital charge by multiplying the positive current exposure of the transaction by the appropriate corresponding risk multiplier. The corresponding risk multiplied and risk weights are given in the table below:

Number of working days after the agreed settlement date	Corresponding risk multiplier	Corresponding risk weight
From 5 to 15	8%	100%
From 16 to 30	50%	625%
From 31 to 45	75%	937.5%
46 or more	100%	1250%

5. Labuan banks are allowed a reasonable transition period to upgrade their information systems to track the number of days after the agreed settlement date and calculate the corresponding capital charge.
6. For non-DvP transactions (i.e. free deliveries), after the first contractual payment/delivery leg, Labuan bank that has made the payment will treat its exposure as a loan if the second leg has not been received by the end of the business day¹⁴⁷. Labuan banks shall use the standardised risk weights formula, respectively set forth in this framework for the exposure to the counterparty, in the same way as it does for all other banking book exposures. However, when exposures are not material, banks may choose to apply a uniform 100% risk weight to these exposures, in order to avoid the burden of a full credit assessment. If five business days after the second contractual payment/delivery date the second leg has not yet effectively taken place, the bank that has made the first payment leg

¹⁴⁷ If the dates when two payment legs are made are the same according to the time zones where each payment is made, it is deemed that they are settled on the same day. For example, if a bank in Tokyo transfers Yen on day X (Japan Standard Time) and receives corresponding US Dollar via CHIPS on day X (US Eastern Standard Time), the settlement is deemed to take place on the same value date.

must apply a 1250% risk weight to the full amount of the value transferred plus replacement cost, if any. This treatment will apply until the second payment/delivery leg is effectively made.

Appendix X List of Recognised Exchanges*

1. American Stock Exchange (USA)
2. Athens Stock Exchange (Greece)
3. Australian Stock Exchange (Australia)
4. Bermuda Stock Exchange (Bermuda)
5. BME Spanish Exchanges (Spain)
6. Bolsa de Comercio de Buenos Aires (Argentina)
7. Bolsa de Comercio de Santiago (Chile)
8. Bolsa de Valores de Colombia (Colombia)
9. Bolsa de Valores de Lima (Peru)
10. Bolsa de Valores do Sao Paulo (Brazil)
11. Bolsa Mexicana de Valores (Mexico)
12. Borsa Italiana SPA (Italy)
13. Bourse de Luxembourg (Luxembourg)
14. Bourse de Montreal (Canada)
15. BSE The Stock Exchange, Mumbai (India)
16. Budapest Stock Exchange Ltd (Hungary)
17. Bursa Malaysia Bhd (Malaysia)
18. Chicago Board Options Exchange (USA)
19. Colombo Stock Exchange (Sri Lanka)
20. Copenhagen Stock Exchange (Denmark)
21. Deutsche Borse AG (Germany)
22. Euronext Amsterdam (Netherlands)
23. Euronext Brussels (Belgium)
24. Euronext Lisbon (Portugal)
25. Euronext Paris (France)
26. Hong Kong Exchanges and Clearing (Hong Kong)
27. Irish Stock Exchange (Ireland)
28. Istanbul Stock Exchange (Turkey)
29. Jakarta Stock Exchange (Indonesia)
30. JSE Ltd. (South Africa)
31. Korea Exchange (South Korea)
32. Ljubljana Stock Exchange (Slovenia)
33. London Stock Exchange (United Kingdom)
34. Malta Stock Exchange (Malta)
35. NASD (USA)
36. National Stock Exchange of India Limited (India)
37. New York Stock Exchange (USA)
38. New Zealand Stock Exchange Ltd (New Zealand)
39. OMX Exchanges Ltd (Finland & Sweden)
40. Osaka Securities Exchange (Japan)
41. Oslo Bors (Norway)
42. Philippine Stock Exchange (Philippines)
43. Shanghai Stock Exchange (China)

- 44. Shenzhen Stock Exchange (China)
- 45. Singapore Exchange (Singapore)
- 46. Stock Exchange of Tehran (Iran)
- 47. Stock Exchange of Thailand (Thailand)
- 48. SWX Swiss Exchange (Switzerland)
- 49. Taiwan Stock Exchange Corp (Taiwan)
- 50. Tokyo Stock Exchange (Japan)
- 51. TSX Group (Canada)
- 52. Warsaw Stock Exchange (Poland)
- 53. Wiener Bourse (Austria)

* To be updated as and when changes occur.

Appendix XI Recognition Criteria for Physical Collateral Used For Credit Risk Mitigation Purposes of Islamic Banking Exposures

General Criteria

1. Labuan banks are allowed to recognise physical assets as eligible collateral for credit risk mitigation purposes for Islamic banking exposures, subject to fulfilling all the minimum requirements specified in this framework and obtaining prior approval from the Board. In addition, Labuan banks are required to notify Labuan FSA two months in advance of any recognition.
2. Any physical assets must be completed for their intended use and must fulfil the following minimum conditions for recognition as eligible collateral:
 - i. The assets are legally owned by the Labuan bank. For *Ijarah* contracts, these are restricted to operating *Ijarah* only, where related costs of asset ownership are borne by the Labuan bank¹⁴⁸; or
 - ii. The physical assets attract capital charges other than credit risk prior to/ and throughout the financing period (e.g. operating *Ijarah* and inventories¹⁴⁹ under *Murabahah*).

Specific Criteria

Commercial real estate (CRE) and residential real estate (RRE)

3. Eligible CRE or RRE collateral are defined as:
 - i. Collateral where risk of the borrower is not materially dependent upon the performance of the underlying property or project, but rather on the underlying capacity of the borrower to repay the debt from other sources. As such, repayment of the facility is not materially dependent on any cash flow generated by the underlying CRE/RRE serving as collateral; and

¹⁴⁸ Shariah requires that the lessor/ owner bears the costs related to the ownership of or any other costs as agreed between the lessor and the lessee.

¹⁴⁹ This excludes inventories which are merely used as a 'pass-through' mechanism such as in Commodity *Murabahah* transactions.

- ii. The value of the collateral pledged must not be materially dependent on the performance of the borrower. This requirement is not intended to preclude situations where purely macro-economic factors affect both the value of the collateral and the performance of the borrower.
4. Subject to meeting the definition above, CRE and RRE will be eligible for recognition as credit risk mitigation under the comprehensive approach only if all of the following operational requirements are met:
- i. **Legal enforceability:** any claim on collateral taken must be legally enforceable in all relevant jurisdictions, and any claim on collateral must be properly filed on a timely basis. Collateral interests must reflect a perfected lien (i.e. all legal requirements for establishing the claim has been fulfilled). Furthermore, the collateral agreement and the legal process underpinning it must be such that they provide for the reporting institution to realise the value of the collateral within a reasonable timeframe;
 - ii. **Objective market value of collateral:** the collateral must be valued at or less than the current fair value under which the property could be sold under private contract between a willing seller and an arm's-length buyer on the date of valuation;
 - iii. **Frequent revaluation:** a Labuan bank is expected to monitor the value of the collateral on a frequent basis and at a minimum once every year. More frequent monitoring is suggested where the market is subject to significant changes in conditions. Acceptable statistical methods of evaluation (for example reference to house price indices, sampling) may be used to update estimates or to identify collateral that may have declined in value and that may need re-appraisal. A qualified professional must evaluate the property when information indicates that the value of the collateral may have declined materially relative to general market prices or when a credit event, such as default, occurs;
 - iv. **Junior liens:** Junior liens or junior legal charges may be taken into account where there is no doubt that the claim for collateral is legally enforceable and

constitutes an efficient credit risk mitigant. Labuan banks could only use the residual value after taking into account collateral haircut. In this case, residual value is derived after deducting exposures with other pledgees, using approved limits or total outstanding amount of the exposures with other pledgees whichever is higher; and

- v. Labuan banks are also expected to meet the following collateral management requirements:
 - a. The types of CRE and RRE collateral accepted by the Labuan bank and lending policies when this type of collateral is taken must be clearly documented;
 - b. The Labuan bank must take steps to ensure that the property taken as collateral is adequately insured against damage or deterioration;
 - c. The Labuan bank must monitor on an ongoing basis the extent of any permissible prior claims (for example tax) on the property; and
- vi. The Labuan bank must appropriately monitor the risk of environmental liability arising in respect of the collateral, such as the presence of toxic material on a property.

Other physical assets¹⁵⁰

- 5. Physical collateral other than CRE and RRE may be recognised as eligible collateral under the comprehensive approach if the following standards are met:
 - i. Existence of liquid markets for disposal of collateral in an expeditious and economically efficient manner; and
 - ii. Existence of well established, publicly available market prices for the collateral. The amount a Labuan bank receives when collateral is realized should not deviate significantly from these market prices.

¹⁵⁰ Physical collateral in this context is defined as non-financial instruments collateral.

6. Subject to meeting the above definition standards, other physical assets will be recognised as credit risk mitigation under the comprehensive approach only if it meets the operational requirements set out for CRE/RRE as well as the following criteria:
- i. **First claim:** only Labuan banks having the first liens on, or charges over, collateral are permitted to recognise this type of collateral as credit risk mitigation. In this regard, the Labuan bank must have priority over all other lenders to the realised proceeds of the collateral;
 - ii. The loan agreement must include detailed descriptions of the collateral plus detailed specifications of the manner and frequency of revaluation;
 - iii. The types of physical collateral accepted by the Labuan bank and policies and practices in respect of the appropriate amount of each type of collateral relative to the exposure amount must be clearly documented in internal credit policies and procedures and available for examination and/or audit review;
 - iv. Labuan bank's credit policies with regard to the transaction structure must address appropriate collateral requirements relative to the exposure amount, the ability to liquidate the collateral readily, the ability to establish objectively a price or market value, the frequency with which the value can readily be obtained (including a professional appraisal or valuation), and the volatility of the value of the collateral. The periodic revaluation process must pay particular attention to "fashion-sensitive" collateral to ensure that valuations are appropriately adjusted downward for fashion, or model-year, obsolescence as well as physical obsolescence or deterioration; and
 - v. In cases of inventories (for example raw materials, finished goods, dealers' inventories of autos) and equipment, the periodic revaluation process must include physical inspection of the collateral.

Leased assets

7. Assets used in operating *Ijārah* and *Ijārah* Muntahia Bittamleek (IMB) (leased assets) may be recognised as eligible collateral and used as credit risk mitigation under the comprehensive approach for collateralised transactions.
8. The leased assets must fulfill a function similar to that of collateral, and recognition of leased assets would be subject to reporting institutions fulfilling all minimum requirements under CRE/RRE or other physical collateral, depending on the type of leased assets, as well as the following additional standards:
 - i. Robust risk management on the part of the Labuan banks acting as the lessors with respect to the location of the asset, the use to which it is put, its age, and planned obsolescence;
 - ii. A robust legal framework establishing the lessor's legal ownership of the asset and its ability to exercise its rights as owner in a timely manner; and
 - iii. The difference between the rate of depreciation of the physical asset and the rate of amortisation of the lease payments must not be so large as to overstate the credit risk mitigation attributed to the leased assets.

Other Additional Criteria

Data maintenance

9. Labuan banks are expected to collect and retain the relevant data pertaining to revaluation and disposal of physical assets as a means to recover from delinquent or defaulted exposures, particularly data on disposal (i.e., selling) amount and timeline of disposal of the physical assets as well as the relevant costs incurred for the disposal.
10. Labuan banks are expected to use the relevant data to verify the appropriateness of the minimum 30% haircut on physical assets particularly non-CRE and non-RRE collateral at least on an annual basis. Labuan banks should use a more stringent

haircut if their internal historical data on disposal of these physical assets reveal loss amounts that exceed the 30% haircut.

11. In addition, for the regulatory retail portfolio, Labuan banks are required to have at least two years of empirical evidence on data such as recovery rates and value of physical collateral prior to its recognition as a credit risk mitigant.

Independent review

12. Labuan banks are required to conduct an independent review¹⁵¹ to ascertain compliance with all minimum requirements specified in this framework for the purpose of recognising physical collateral as a credit risk mitigant. The review should be performed prior to the recognition of the physical collateral as a credit risk mitigant and at least annually thereafter to ensure on-going fulfilment of all criteria and operational requirements.

¹⁵¹ Validation must be performed by a unit that is independent from risk/taking business units.

Appendix XII Summary Table of Gross Income Computation

Conventional Banking and Islamic Banking Operations

Net Interest Income	A
<i>Comprising:</i>	
All Interest income	XXX
Excluding interest suspended and recoveries	
Less: Interest expense	(x)
Net¹⁵² Non-Interest Income	B
<i>Comprising:</i>	
Net commissions/fees receivable	XX
Including outsourcing fees receivable, excluding outsourcing fees paid	XX
Net income from trading book securities:	
Including unrealised gains/losses from fair value changes of trading book securities	XX
Other operating income	X
Including intra-group income	X
Dividend income from investment in securities	X
Others	
Excluding:	
Dividend income from subsidiaries and associated companies	
Realised or unrealised profits/losses from sales or impairment of securities in banking book	
Income from extra-ordinary or irregular item	
Income from insurance recoveries	
Total Gross Income from Islamic Banking Operations	C
Total Gross Income	A + B + C

¹⁵² Net only from any direct expenses associated with the income generated/received.

Islamic Banking Operations

Net income from financing activities	A
Net income from investment activities	B
Other income: Realised/unrealised gains/losses from sales or fair value changes of trading book securities Net commission/fees receivables Intra-group income Dividend income from investment in securities Income from non- <i>Shari'ah</i> compliant sources Others <u>Excluding:</u> Dividend income from subsidiaries and associated companies Realised or unrealised profits/losses from sales or impairment of securities in banking book Income from extra-ordinary or irregular item Income from insurance recoveries Bad debt recovered	C
Less: Income attributable to investment account holders and other depositors	D
Total Gross Income	A + B + C - D

Appendix XIII Illustration of Computation of Exposures with Credit Risk Mitigation Effects

Example 1

Loan of USD1,000 with 5 years residual maturity to a BBB-rated corporate. The full amount of the loan is fully guaranteed by a corporate with an external rating (RAM) of AAA.

Solution (Simple approach)

Obligor's risk weight (RW)	Guarantor's RW
100%	20%

Using RW of the substitution, the RWA:

$$\text{RWA} = 1000 \times 20\%$$

$$= \text{USD200}$$

Example 2

Loan of USD1,000 to BBB-rated corporate. Half of the amount of the loan is secured by a AAA-rated MGS.

Solution (Comprehensive approach)

Variables	Supervisory haircut
He	No haircut applied as exposure is in the form of cash
Hc	0.02 ¹⁵³
Hfx	No currency mismatch

¹⁵³ Refer to paragraph 2.118 standard supervisory haircuts table

$$\begin{aligned}
\text{Adjusted exposure (E*)} &= \text{Max} \{0, [E \times (1 + H_e) - C \times (1 - H_c - H_{fx})]\} \\
&= [1000 \times (1 + 0) - 500 \times (1 - 0.02 - 0)] \\
&= \text{USD510} \\
\text{Risk-weighted assets} &= \text{USD510} \times 100\% \\
(\text{RWA})^{154} &= \text{USD510}
\end{aligned}$$

Example 3

Loan of USD1,000 to a small business with a residual maturity of 5 years. The loan is secured by receivables (the ratio of collateral value to nominal exposure is 125%).

Solution

No recognition for receivables as risk mitigation under the standardisation approach. Thus, the appropriate RW to be applied is 75%, regulatory retail (loan to small business)

$$\begin{aligned}
\text{RWA} &= \text{USD1,000} \times 75\% \\
&= \text{USD750}
\end{aligned}$$

Example 4

Loan of USD1,000 to a B-rated corporate with a 3-year residual maturity. Half of the exposure, USD500, is guaranteed by an A-rated bank.

Solution

$$\begin{aligned}
\text{RWA} &= (\text{Exposure covered by guarantee, GA}) + (\text{exposure not covered}) \\
&= (500 \times 50\%^{155}) + [(1000 - 500) \times 125\%] \\
&= 250 + 625 \\
&= \text{USD875}
\end{aligned}$$

¹⁵⁴ Refer to **Appendix III** on risk weight table for corporate exposure.

¹⁵⁵ Refer to **Appendix III** on risk weight table for bank exposures.

Example 5

Bank A repos out cash of USD1,000 to a corporate with an external rating of AA. The corporate provides collateral in the form of debt securities issued by a bank with an external rating of AA. The debt securities have a remaining maturity of 7 years and a market value of USD990.

Variables	Supervisory haircuts	Scaling factor	Adjusted haircuts
He	Exposure in the form of cash, supervisory haircut = 0	0	Not applicable
Hc	0.08	$= \sqrt{[NR + (TM - 1)]/10}$ $= \sqrt{[1^{72} + (5^{73} - 1)]/10}$ $= 0.71^{156}$	$= 0.08^{157} \times 0.71$ $= 0.06$
Hfx	No currency mismatch	0	Not applicable

Solution

$$\begin{aligned}
 E^* &= \max \{0, [E \times (1 + He) - C \times (1 - Hc - Hfx)]\} \\
 &= [1000 \times (1+0) - 990 \times (1 - 0.06 - 0)] \\
 &= 1000 - 930.6 \\
 &= \text{USD69.40}
 \end{aligned}$$

$$\begin{aligned}
 RWA &= E^* \times RW \\
 &= 69.40 \times 0.5 \\
 &= \text{USD34.70}
 \end{aligned}$$

¹⁵⁶ 5 business days holding period for repo style transaction, refer paragraph 2.120.

¹⁵⁷ Refer to paragraph 2.117 for standard supervisory haircuts table.

Example 6

Bank A repos out USD1000 to Bank B (AA rated). It receives as collateral, 7- year BBB rated corporate bonds denominated in foreign currency with a value of USD800.

	Supervisory haircuts	Scaling factor	Adjusted haircuts
He	Exposure in the form of cash, haircut = 0.	Not applicable	
Hc	0.06	$= \sqrt{[NR + (TM - 1)]/10}$ $= \sqrt{1^{75} + (5^{76} - 1)]/10}$ $= 0.71^{158}$	$= 0.06 \times 0.71$ $= 0.04$
Hfx	0.08	$= \sqrt{1^{77} + (5^{78} - 1)]/10}$ $= 0.71^{159}$	$= 0.08 \times 0.71$ $= 0.06$

Solution

$$\begin{aligned}
 E^* &= E^* = \max \{0, [E \times (1+He) - C \times (1 - Hc - Hfx)]\} \\
 &= [1000 \times (1+0) - 800 \times (1 - 0.04 - 0.06)] \\
 &= 1000 - 720 \\
 E^* &= \mathbf{USD280} \\
 RWA &= E^* \times RW \\
 &= 280 \times 0.5 \\
 &= \mathbf{USD140}
 \end{aligned}$$

¹⁵⁸ 5 business days holding period for repo style transaction, refer paragraph 2.120.

¹⁵⁹ 5 business days holding period for repo style transaction, refer paragraph 2.120.

Example 7

Bank X lends cash of USD1000 to Bank Z (A rated) for a period of 5 years.

Bank Z places a 2 year deposit of USD800 in Bank X. *Solution*

Step 1. Calculate value of credit protection adjusted for maturity mismatch

$$\begin{aligned}Ca &= C \times (1 - H_c - H_{fx}) \times (t - 0.25) / (T - 0.25) \\&= 800 \times (1 - 0 - 0) \times (2 - 0.25) / (5 - 0.25) \\&= 800 \times 0.37 \\&= \textbf{USD296}\end{aligned}$$

Step 2. Calculate adjusted exposure

$$\begin{aligned}E^* &= \max \{0, [E \times (1 + H_e) - Ca]\} \\&= 1000 \times (1 + 0) - 296 \\&= \textbf{USD704}\end{aligned}$$

$$\begin{aligned}RWA &= E^* \times RWA \\&= 704 \times 50\%^{160} \\&= \textbf{USD352}\end{aligned}$$

¹⁶⁰ Refer to **Appendix III** on risk weight table for bank exposures.

Example 8: Proportional Cover

Loan to a BBB corporate of USD1,000 with a 3 year residual maturity. A guarantee of USD500 from a bank (A rated) with a remaining maturity of 3 years serves as collateral. The secured and unsecured portions are equal in seniority.

Solution

$$\begin{aligned}\text{RWA} &= (\text{GA} \times \text{RW guarantor}) + [(\text{E} - \text{GA}) \times \text{RW obligor}] \\ &= (500 \times 50\%) + [(1000 - 500) \times 100\%] \\ &= 250 + 500 \\ &= \text{USD750}\end{aligned}$$

Example 9: Treatment of Pools of Credit Risk Mitigation Techniques

Loan to a BBB corporate of USD1,000 with a 3 year residual maturity. The loan is secured by Guarantee of USD1,000 from a bank (A rated). Half of the guarantee has residual maturity of 3 years and the other half, a residual maturity of 2 years. In addition, the loan is also secured by an AAA rated MGS of USD500 with a residual maturity of 3 years. The bank opts to obtain the largest capital relief possible from the various risk mitigants.

Solution

$$\begin{aligned}\text{RWA} &= (\text{GA} \times \text{RW MGS}) + [(\text{E} - \text{GA}) \times \text{RW guarantor}] \\ &= (500 \times 0\%) + [(1000 - 500) \times 50\%] \\ &= \text{USD250}\end{aligned}$$

Appendix XIV Illustration of Computation of Large Exposure Risk Requirement

Scenario A

A Labuan bank holds exposures consisting of shares and in-the-money call warrants with market value amounting to USD20 million in a corporation listed on G10 stock exchange. The Labuan bank's Total Capital is currently USD500 million and the total issued paid-up capital of the corporation is USD100 million. All the exposures are held in the trading book.

Step 1

Determine the amount in excess of threshold. The LERR computation will be based on exposures to a single equity exceeding 15% of the Labuan bank's Total Capital or 10% of the issuer's paid-up capital, whichever is lower.

	LERR threshold (USD million)	Amount within threshold (USD million)	Amount in excess of lowest threshold (USD million)	Total exposures (USD million)
Based on Labuan bank's Total Capital	$500 \times 15\% = 75$		Not applicable.	
Based on issuer's paid- up capital	$100 \times 10\% = 10$	10	10	20

Step 2

Calculate the LERR capital charge by multiplying the market value of the equity position in excess of the threshold, with the sum of the corresponding general and specific risk weights as per the market risk component of the Banking Capital Adequacy Framework. The LERR capital requirement is incurred in addition to the market risk capital charge for large exposures to a single equity.

$$\begin{aligned}\text{Market risk capital charge} & \text{ USD20 million} \times (8\% + 8\%) \\ & = \text{USD3.2 million} \\ \text{LERR capital charge} & \text{ USD10 million} \times (8\% + 8\%) \\ & = \text{USD1.6 million}\end{aligned}$$

Step 3

Calculate the LERR risk-weighted asset.

$$\begin{aligned}\text{LERR risk-weighted asset} & \text{ USD1.6 million} \times 12.5 \\ & = \text{USD20 million}\end{aligned}$$

Scenario B

A Labuan bank holds preference shares with market value amounting to USD80 million in an unlisted corporation. The Labuan bank's Total Capital is currently USD500 million and the total issued paid-up capital of the corporation is USD1 billion. All the exposures are held in the banking book.

Step 1

Determine the amount in excess of the lowest threshold.

	LERR threshold (USD million)	Amount within threshold (USD million)	Amount in excess of lowest threshold (USD million)	Total exposures (USD million)
Based on Labuan bank's Total Capital	$500 \times 15\% = 75$	75	5	80
Based on issuer's paid-up capital	$1000 \times 10\% = 100$	Not applicable		

Step 2

Calculate the LERR risk-weighted asset by multiplying the market value of the equity exposure (banking book position) in excess of the threshold with the corresponding risk weight, i.e.100%.

Credit risk-weighted asset	USD80 million x 100% =USD80 million
LERR risk-weighted asset	USD5 million x 100% =USD5 million

Appendix XV Capital Treatment for Sell and Buyback Agreement (SBBA)/Reverse SBBA Transactions

The capital treatment for exposures from SBBA and reverse SBBA transactions under the banking book and trading book is provided below:

SBBA	Reverse SBBA ¹⁶¹
Trading book transaction	
<p>1) Market risk in the forward purchase transaction</p> <ul style="list-style-type: none"> For cash position: <ul style="list-style-type: none"> a. General risk for the short cash position b. There is no specific risk charge for the cash position For the underlying asset of the forward purchase transaction <ul style="list-style-type: none"> a. General risk for the underlying asset b. Specific risk for the underlying asset <p>2) Counterparty credit risk (as per the banking book treatment below).</p>	<ul style="list-style-type: none"> Market risk in the forward sale transaction <ul style="list-style-type: none"> General risk for the long cash position Counterparty credit risk (as per the banking book treatment below)

¹⁶¹ In addition to the capital charge applied here, if an arrangement that could effectively transfer the risk back to the SBBA seller is not legally binding, the SBBA buyer is required to provide for credit risk charge of the underlying asset.

SBBA	Reverse SBBA ¹⁵⁴
Banking book transactions	
Standardised Approach for Credit Risk	
<p>1) Credit risk in the underlying asset in the forward purchase transaction</p> <ul style="list-style-type: none"> • Credit RWA = Underlying asset value x CCF of forward asset purchase (i.e. 100%) x risk weight based on recognised issue / issuer rating of the asset. <p>2) Counterparty credit risk in the forward purchase transaction</p> <ul style="list-style-type: none"> • Credit RWA = Credit equivalent amount (derived from the Current Exposure Method) x risk weight of counterparty. <p>Note: The 'positive MTM' amount refers to the difference between the underlying asset market value and forward purchase transaction value, where the underlying asset market value > the forward purchase transaction value.</p>	<p>1) Counterparty credit risk in the forward purchase transaction</p> <ul style="list-style-type: none"> • Credit RWA = Credit equivalent amount (derived from the Current Exposure Method) x risk weight of counterparty. <p>Note: The 'positive MTM' amount refers to the difference between the underlying asset market value and forward sale transaction value, where the underlying asset market value < the forward sale transaction value.</p>

The underpinning basis for the capital treatment for SBBA and reverse SBBA transactions is the risk profile of the underlying transactions i.e. outright sale/ buy contract as well as forward transactions as *waad* (promise) to buyback/ sellback. Hence, while SBBA and reverse SBBA are not securities financing transactions, the treatment prescribed for securities financing transactions (e.g. requirements on maturity and floor) is also applicable to SBBA and reverse SBBA except for treatment on credit risk mitigation (Part B.2.5 and Part B.3.4 respectively).

Asset-backed commercial paper (ABCP) programme

An ABCP programme predominately issues commercial paper with an original maturity of one year or less that is backed by assets or other exposures held in a bankruptcy-remote SPV.

Asset-backed Sukuk

Risk and reward are dependent on the underlying asset.

Asset-based Sukuk

Risk and reward are dependent on the obligor that originates/issues the instrument.

Assignment

An assignment may also achieve an effective transfer of the seller's rights to the principal sum and interest, usually with the exclusion of certain obligations. However, there is potential risk that some rights may not be effectively assigned, thus resulting in the impairment of the buyer's entitlements to certain rights accrued between the borrower and the seller, such as the late payment fee, prepayment charges, late interest charges, repossession of collateral, and set-off arrangements (for example, netting of obligations). Another constraint is the restriction on the assignability of loans that may be imposed in loan agreements prohibiting any assignment to third parties without the consent of the parties to the agreement.

In the case of a legal assignment, the seller will notify the borrower that the rights to the assets are being assigned to the buyer. This notification will ensure that the buyer's rights are not impaired by other intervening rights, or at the minimum, the seller should provide a warranty that all rights to the principal sum and interest are being assigned and no other right exists.

In the case of an equitable assignment where notice of the transfer is not given to the borrowers (due to impracticality, etc), the SPV buyer and consequently the investors are exposed to potential legal risks (where the transfer is not perfected). For example, investors may lose priority to the holder of a legal assignment that may be created subsequently by the seller/originator. Another legal risk concerns the fact that the buyer or investor may not have direct rights against the borrower and needs to join the seller/originator in any legal action initiated against the borrower with respect to the receivables. Similarly, in cases where a borrower's obligation is offset with its deposit (that is, enforceable on-balance sheet netting), unless the SPV's claim is perfected, there is a risk that the SPV may not be entitled to the full amount due from the borrower.

Credit enhancement

A credit enhancement is a contractual arrangement in which a Labuan bank retains or assumes a securitisation exposure and, in substance, provides some degree of added protection to other parties to the transaction.

Credit-enhancing interest-only strip

A credit-enhancing interest-only strip is an on-balance sheet asset that represents a valuation of cash flows related to future margin income and is subordinated.

Excess spread

Excess spread is generally defined as gross finance charge collections and other income received by the trust or SPV minus certificate interest, servicing fees, charge-offs, and other senior SPV expenses.

Future margin income (FMI)

The amount of income anticipated to be generated by the relevant exposures over a certain period of time that can reasonably be assumed to be available to cover potential credit losses on the exposures (i.e. after covering normal business expenses). FMI usually does not include income anticipated from new accounts.

Gain-on-sale

Gain-on-sale is any residual interest retained by the originating banking institution that is, an on-balance sheet asset that represents a retained beneficial interest in a securitisation accounted for as a sale, and that exposes the originating banking institution to any credit risk directly or indirectly associated with the transferred asset, that exceeds a pro rata share of that originating banking institution's claim on the asset.

Investment grade

A securitisation exposure is deemed to be of investment grade if an ECAI recognised by Labuan FSA has assigned it a rating within long-term rating categories 1 to 3, or short-term rating categories 1 to 3 (as defined in **Appendix III**).

Novation

The transfer involves a tripartite arrangement whereby the two parties to the original contract, the originator and the borrower, agree with the SPV that the SPV shall become a substitute for the originator thus assuming the originator's rights and obligations under the original contract. This method is considered the cleanest transfer. However, it may involve legal procedures and requirements such as obtaining the signature of borrowers as a party to the novation agreement effecting the transfer of assets and titles, legal fees, stamp duty, etc.

Originating Banking Institution

A Labuan bank is considered to be an originator in a securitisation transaction if it meets either of the following conditions:

- i. The Labuan bank originates directly or indirectly (e.g. a Labuan bank purchases a third party financial instrument via its balance sheet or acquires credit risk through credit derivatives and subsequently sells or transfers to an SPV) the underlying exposures included in the securitisation; or
- ii. The Labuan bank serves as a sponsor of an ABCP conduit or similar programme that acquires exposures from third-party entities. In the context of such a program,

a Labuan bank would generally be considered a sponsor and, in turn, an originator if it, in fact or in substance, manages or advises the programme, places securities into the market, or provides liquidity and/or credit enhancements.

Residual interest

Residual interest can take several forms such as credit-enhancing interest- only strips, spread accounts, cash collateral/reserve accounts, retained subordinated interests and other forms of over-collateralisation, accrued but uncollected interest on transferred assets (presumably in credit card securitisations) that when collected, will be available to serve in a credit-enhancing capacity. Residual interests generally do not include interests purchased from a third party other than the purchased credit-enhancing interest-only strips.

Revolving exposures

Credit exposures where the borrower is permitted to vary the drawn amount and repayments within an agreed limit under a line of credit (e.g. credit card receivables and corporate loan commitments).

Servicer

A servicer is one (typically the originating banking institution) that manages the underlying credit exposures of a securitisation on a day-to-day basis in terms of collection of principal and interest, which is then forwarded to investors in the securitisation transaction.

Special purpose vehicle (SPV)

An SPV is an entity set up for a specific purpose, the activities of which are limited to those necessary to accomplish the purpose of the SPV, and the structure of which is intended to isolate the SPV from the credit risk of an originator or seller of the exposures. SPVs are commonly used as financing vehicles in which exposures are sold to a SPV or similar entity in exchange for cash or other assets funded by debt issued by the SPV. Such SPVs are used as a conduit for risk transfer purposes in the case of synthetic securitisation.

Synthetic securitisation

A synthetic securitisation is a structure with at least two different stratified risk positions or tranches that reflect different degrees of credit risk. The structure involves the transfer of credit risk of an underlying pool of exposures by the originator, in whole or in part, using CRM tools such as credit-linked notes, credit default swaps or guarantees to hedge the credit risk of the underlying exposures. Accordingly, the investors are exposed to the risk and performance of the underlying exposures.

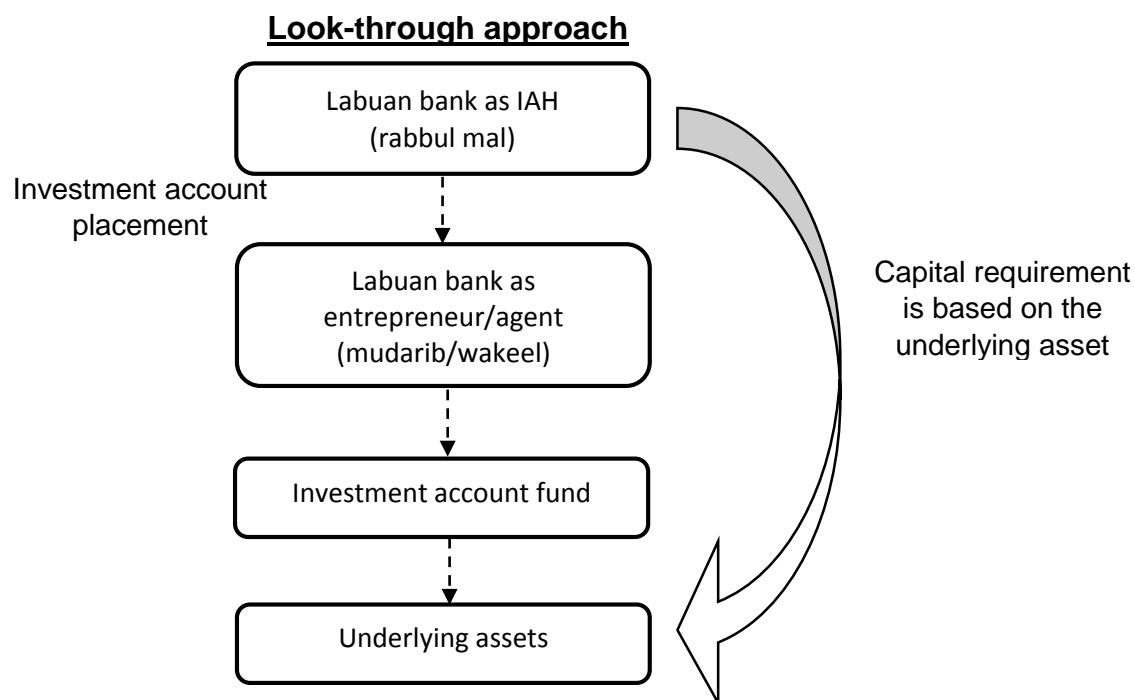
Traditional securitisation

A traditional securitisation involves a transfer of an underlying pool of exposures to a SPV which issues asset-backed securities to capital market investors. The cash flow generated from the underlying pool of exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of credit risk. Investors are exposed to the risk and performance of the specified underlying exposures rather than the performance of the originator of the underlying exposures.

Appendix XVII Capital treatment for Investment Accounts

The “Look-Through” Approach (LTA)

1. The “look-through” approach refers to the calculation of credit and market risk capital requirements based on the underlying asset funded by an investment account, as illustrated below:



2. Where Labuan bank is an investment account holder (IAH), the Labuan bank shall apply the LTA only when the following conditions are met:
 - i. The financial information about the underlying asset is maintained at a sufficiently granular level to enable the calculation of the corresponding right weights¹⁶², and
 - ii. The financial report of the investment account funds are prepared at least at the same reporting interval as that of the IAH¹⁶⁵.

¹⁶² The IAH may specify the information required and time period for such disclosure in the investment account agreement with the mudarib/wakeel.

3. Under the LTA, the IAH shall calculate the credit and market risk capital requirements of the investment account as if it directly holds the underlying assets using similar approach applied by the IAH on its own assets.

Credit Risk

- i. Under the standardised approach, the IAH shall calculate the capital requirement based on the risk weight applicable to the obligor of the underlying assets.
- ii. The IAH may take into account the effect of any CRM only when the CRM used by the *mudarib/wakeel* fulfills the relevant CRM technique requirements and there is a clear and enforceable legal documentation that ensures the benefit of CRM can be effectively passed to the IAH.

Market Risk

- i. Under the standardised approach, the IAH shall apply the specific risk and general risk capital charges applicable to the underlying assets.
- ii. The IAH may offset its own position against positions arising from the underlying assets provided that the conditions specified in this policy documents are met and that there are no obstacles to timely recoverability of funds from the *mudarib/wakeel*¹⁶³.

The alternative approach when the LTA's conditions are not met

4. When the conditions in paragraph 2 are not met, the IAH shall treat the investment account as exposure to equities.

Credit risk

For the standardised approach, apply a risk-weight of 150%.

Market risk

For the standardised approach, apply a specific risk charge of 14%, in addition to the general risk charge.

¹⁶³ Consequently the *mudarib/wakeel* is not allowed to recognise such position arising from the underlying assets to offset against its own positions.

Appendix XVIII Illustration on the treatment of underwriting exposures

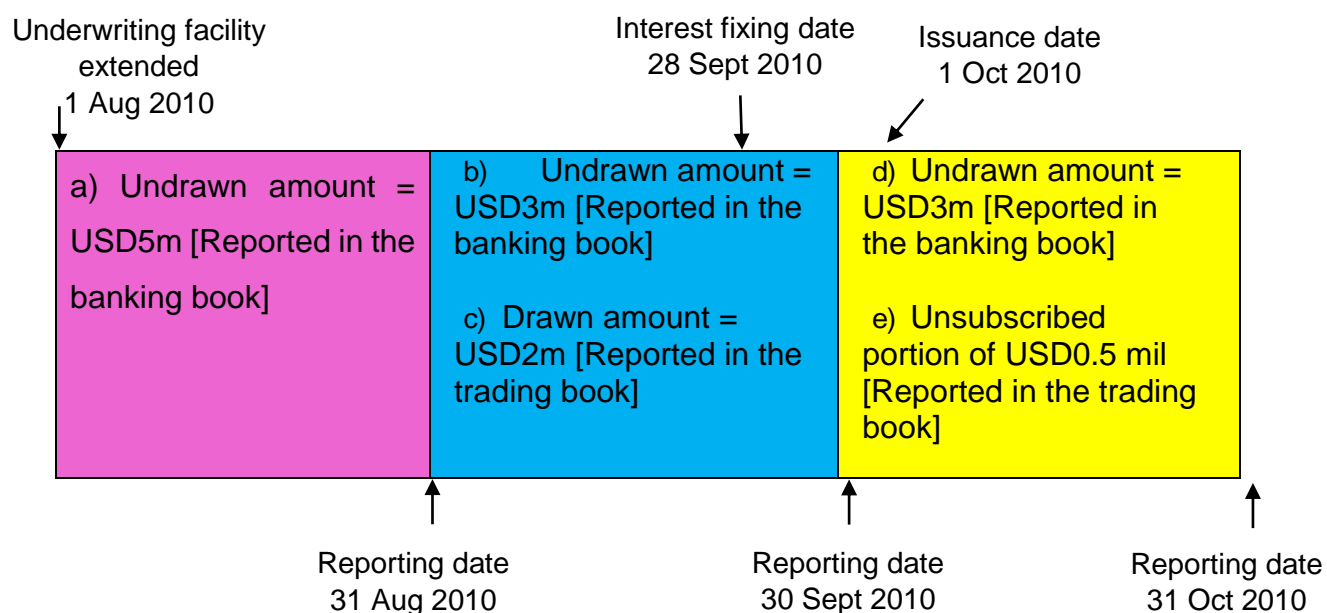
Example

Bank A (applying the Standardised Approach for Credit Risk) extends a 5-year underwriting Commercial Paper (CP) facility of USD5 million to Company ABC on 1 September 2010. On 28 September 2010, Company ABC decides to utilise the facility with a CP issuance of USD2 million.

Nominal amount of CP underwriting facility granted	USD5 million
Nominal amount of underwriting (drawn portion)	USD2 million
Rating and tenor	P1 rated CP, 3 months tenor
Date of fixing the rate (drawn portion)	28 September 2010
Date of issuance	1 October 2010

On 1 October 2010, the CP was issued where:

- USD1.5 million was subscribed; and
- USD0.5 million was unsubscribed, hence remained with Bank A.



At the reporting date 31 August 2010, where it falls between the interest fixing date and issue date:

- a) The undrawn amount is deemed as a banking book position and is subject to the credit risk capital charge

$$\text{USD5m} \times 50\% \times 8\%$$

At the reporting date 30 September 2010, where it falls between the interest fixing date and issue date:

- b) The undrawn amount is deemed as a banking book position and is subject to the credit risk capital charge

$$\text{USD3m} \times 50\% \times 8\%$$

- c) The drawn amount is deemed as a trading book position and is subject to the market risk capital charge based on the maturity and rating of the CP issued:

$$\text{The general risk: } \text{USD2m} \times 50\% \times 0.2\%$$

$$\text{The specific risk: } \text{USD2m} \times 50\% \times 0.25\%$$

At the reporting date 31 October 2010, where the CP has been issued and Bank A holds USD0.5m of the unsubscribed portion:

- d) The undrawn amount is deemed as a banking book position and is subject to the credit risk capital charge

$$\text{USD3 mil} \times 50\% \times 8\%$$

- e) The unsubscribed portion is deemed as a trading book position (with intention to sell down) and is subject to the market risk capital charge based on the maturity and rating of the CP purchased:

$$\text{The general risk: } \text{USD0.5m} \times 0.2\%$$

$$\text{The specific risk: } \text{USD0.5m} \times 0.25\%$$

Appendix XIX Capital Treatment for Credit Derivatives in the Trading Book

The following table summarises the capital treatment for credit derivatives in the trading book¹⁶⁴:

Transaction	Risk Type	Protection seller	Protection buyer
Credit Default Swaps	General market risk	A long position in each premium or interest payment (each payment is treated as a zero coupon risk-free position) when there are any periodic premiums or interest payments to be received.	A short position in each premium or interest payment (each payment is treated as a zero coupon risk-free position) when there are any periodic premiums or interest payments to be paid.
	Specific risk	A position in the reference asset based on the notional amount with a maturity equal to the expiry date of the swap.	A position in the reference asset based on the notional amount with a maturity equal to the expiry date of the swap. An offset on the specific risk of the reference asset is allowed as prescribed in paragraphs 4.50 to 4.52.
First-to-Default	General market risk	A long position in each premium or interest payment (each payment is treated as a zero coupon risk-free position) when there are any periodic premiums or interest payments to be received.	A short position in each premium or interest payment (each payment is treated as a zero coupon risk-free position) when there are any periodic premiums or interest payments to be paid.
	Specific risk	A position in all the reference assets in the basket based on the notional amount with a maturity equal to the expiry date of the protection ¹⁶⁵ .	A position in all the reference assets based on the notional amount with a maturity equal to the expiry date of the

¹⁶⁴ For the avoidance of doubt, Labuan banks must also compute counterparty credit risk for these transactions.

¹⁶⁵ If the credit protection product has an external credit assessment from an eligible ECAI, the risk weight as specified for securitisation in Part F will be applied. If the product is not rated by an eligible ECAI, the risk weights of the assets included in the basket will be as prescribed in Appendix III.

Transaction	Risk Type	Protection seller	Protection buyer
		The total specific risk capital requirement is capped at the maximum payout possible under the derivative contract.	protection. An offset on the specific risk of the reference asset with the lowest specific risk charge is allowed as prescribed in paragraphs 4.50 to 4.52.
Second-to-Default	General market risk	A long position in each premium or interest payment (each payment is treated as a zero coupon risk-free position) when there are any periodic premiums or interest payments to be received.	A short position in each premium or interest payment (each payment is treated as a zero coupon risk-free position) when there are any periodic premiums or interest payments to be paid.
	Specific risk	<p>A position in all the reference assets in the basket based on the notional amount with a maturity equal to the expiry date of the protection¹⁶⁵, except for the asset with the lowest specific risk charge, which can be excluded from the computation.</p> <p>The total specific risk capital requirement is capped at the maximum payout possible under the derivative contract.</p>	<p>A position in all the reference assets based on the notional amount with a maturity equal to the expiry date of the protection.</p> <p>An offset on the specific risk of the reference asset with the second lowest specific risk charge is allowed as prescribed in paragraphs 4.50 to 4.52. However, this is only recognised when first-to-default protection has also been obtained or when one of the assets within the basket has already defaulted.</p>
Credit Linked Notes	General market risk	A long position in the note issued based on the notional amount with a maturity equal to the expiry date of the note or the date which the interest rate will be reset.	A short position in the note issued based on the notional amount with a maturity equal to the expiry date of the note or the date which the interest rate will be reset.

Transaction	Risk Type	Protection seller	Protection buyer
	Specific risk	<p>A position in the reference asset based on the notional amount with a maturity equal to the expiry date of the note.</p> <p>Also, a position in the note issued based on the notional amount with a maturity equals to the expiry date of the note or the date which the interest rate will be reset.</p>	<p>A position in the reference asset based on the notional amount with a maturity equal to expiry date of the note.</p> <p>An offset on the specific risk of the reference asset is allowed as prescribed in paragraphs 4.50 to 4.52.</p>
Total Return Swaps	General market risk	<p>A long position in the reference asset based on the notional amount with a maturity equal to the expiry date of the swap.</p> <p>Also, a short position in each premium or interest payment (each payment is treated as a zero coupon risk-free position) when there are any periodic premiums or interest payments to be paid.</p>	<p>A short position in the reference asset based on the notional amount with a maturity equal to the expiry date of the swap.</p> <p>Also, a long position in each premium or interest payment (each payment is treated as a zero coupon risk-free position) when there are any periodic premiums or interest payments to be received.</p>
	Specific risk¹⁶⁶	<p>A position in the reference asset based on the notional amount with a maturity equal to the expiry date of the swap.</p>	<p>A position in the reference asset based on the notional amount with a maturity equal to the expiry date of the swap.</p> <p>An offset on the specific risk of the reference asset is allowed as prescribed in paragraphs 4.50 to 4.52.</p>

¹⁶⁶ The long or short position is based on the reference asset if cash settled, or based on the deliverable asset if physical delivery.