



ISLAMIC FINANCIAL SERVICES BOARD

EXPOSURE DRAFT – 23

**REVISED CAPITAL ADEQUACY STANDARD
FOR INSTITUTIONS OFFERING ISLAMIC
FINANCIAL SERVICES**

[BANKING SEGMENT]

*Comments on this Exposure Draft should be sent to the IFSB's
Secretary-General not later than 2 January 2020 at email*

ifsb_sec@ifsb.org, or facsimile +603-91951405

4 November 2019

ABOUT THE ISLAMIC FINANCIAL SERVICES BOARD (IFSB)

The IFSB is an international standard-setting organisation which was officially inaugurated on 3 November 2002 and started operations on 10 March 2003. The organisation promotes and enhances the soundness and stability of the Islamic financial services industry by issuing global prudential standards and guiding principles for the industry, broadly defined to include the banking, capital markets and insurance sectors. The standards prepared by the IFSB follow a lengthy due process as outlined in its Guidelines and Procedures for the Preparation of Standards/Guidelines, which involves, among others, the issuance of exposure drafts, holding of workshops and, where necessary, public hearings. The IFSB also conducts research and coordinates initiatives on industry-related issues as well as organises roundtables, seminars and conferences for regulators and industry stakeholders. Towards this end, the IFSB works closely with relevant international, regional and national organisations, research/educational institutions and market players.

For more information about the IFSB, please visit www.ifsb.org

IFSB TECHNICAL COMMITTEE

Chairperson

Mr. Khalid Omar al-Kharji – Central Bank of the United Arab Emirates

Deputy Chairperson

Mr. Waleed Al Awadhi – Central Bank of Kuwait

Members*

Dr. Gaffar A. Khalid	Islamic Development Bank
Mrs. Shireen Al Sayed	Central Bank of Bahrain
Mr. Abu Farah Md. Nasser <i>(until 7 February 2019)</i>	Bangladesh Bank
Mr. A. K. M. Amjad Hussain <i>(from 29 April 2019)</i>	Bangladesh Bank
Ms. Rafezah Abd Rahman	Autoriti Monetari Brunei Darussalam
Mr. Mohamed Aboumoussa	Central Bank of Egypt
Dr. Jardine Husman	Bank Indonesia
Mr. Ahmad Soekro Tratmono	Financial Services Authority, Indonesia
Dr. Jafar Jamali	Securities and Exchange Organization, Iran
Prof. Dr. Mahmood Dagher	Central Bank of Iraq
Mr. Arafat Alfayoumi	Central Bank of Jordan
Mr. Alibek Nurbekov	Astana Financial Services Authority, Kazakhstan
Mrs. Madelena Mohamed <i>(from 6 December 2018)</i>	Bank Negara Malaysia
Mrs. Madelena Mohamed	Bank Negara Malaysia
Datuk Zainal Izlan Zainal Abidin <i>(until 1 April 2019)</i>	Securities Commission Malaysia
Mr. Noraizat Shik Ahmad <i>(from 29 April 2019)</i>	Securities Commission Malaysia
Mr. Mohamed Triqui	Bank Al-Maghrib, Morocco
Mr. Muhammad Wada Mu'azu Lere <i>(until 13 November 2018)</i>	Central Bank of Nigeria
Mr. Ibrahim Sani Tukur <i>(from 29 April 2019)</i>	Central Bank of Nigeria
Dr. Salisu Hamisu <i>(from 29 April 2019)</i>	Nigeria Deposit Insurance Corporation
Mr. Saud Al Busaidi <i>(from 29 April 2019)</i>	Central Bank of Oman
Mr. Ghulam Muhammad Abbasi	State Bank of Pakistan
Mr. Hisham Saleh Al-Mannai	Qatar Central Bank

Dr. Sultan Alharbi	Saudi Arabian Monetary Authority
Mr. Mohammed Hamad Al-Madhi <i>(until 14 March 2019)</i>	Capital Market Authority, Saudi Arabia
Mr. Abdulrahman Al-Hussayen <i>(from 29 April 2019)</i>	Capital Market Authority, Saudi Arabia
Mrs. Somia Amir Osman Ibrahim	Central Bank of Sudan
Mr. Ömer Çekin	Banking Regulation and Supervision Agency, Turkey
Mr. Yavuz Yeter	Central Bank of the Republic of Turkey
Mrs. Ilic Basak Sahin <i>(until 29 April 2019)</i>	Capital Markets Board of Turkey

*** In alphabetical order of the country the member's organisation represents, except international organisations, which are listed first.**

**WORKING GROUP FOR THE REVISED CAPITAL ADEQUACY STANDARD FOR INSTITUTIONS
OFFERING ISLAMIC FINANCIAL SERVICES (BANKING SEGMENT)**

Chairperson

Mr. Khalid Omar Al-Kharji – Central Bank of the United Arab Emirates

Deputy Chairperson

Mr. Ghulam Muhammad Abbasi - State Bank of Pakistan

Mr. Abdullah Haron	International Monetary Fund
Mr. Yahya Aleem ur Rehman	Islamic Development Bank
Mr. Noel Reynolds	Bank for International Settlements
Ms. Mariam Abul-Qassim Jowhary	Central Bank of Bahrain
Mr. Abd Rahim Bin Shukri	Autoriti Monetari Brunei Darussalam
Mr. Malcolm Liew Shaww Kong	Autoriti Monetari Brunei Darussalam
Ms. Yasmine Soliman	Central Bank of Egypt
Mrs. Tri Puji Lestari	Bank Indonesia
Ms. Nyimas Rohmah	Indonesia Financial Services Authority
Mr. Dheyaa Salim Beda	Central Bank of Iraq
Mr. Fawzi Mustafa Abdallah Alsous	Central Bank of Jordan
Ms. Alfiya Salikhova	Astana Financial Services Authority
Ms. Mariam Abdulsalam	Central Bank of Kuwait
Mr. Faizal Jaafar	Bank Negara Malaysia
Mr. Hicham Chmanti Houari	Bank Al-Maghrib
Mr. Maishanu Bashirudeen Mohammed	Central Bank of Nigeria
Mr. Suhail Issa Al Zadjali	Central Bank of Oman
Dr. Azam Ali	State Bank of Pakistan
Ms. Rhodora M. Brazil-De Vera	Bangko Sentral ng Pilipinas
Mr. Salem Al- Kuwari	Qatar Central Bank
Mr. Abdulaziz Alhisan	Saudi Arabian Monetary Authority
Mr. Muhammed İslami Önal	Central Bank of the Republic of Turkey
Ms. Suhaila Al Falasi	Central Bank of the United Arab Emirates

***In alphabetical order of the country the member's organisation represents, except international organisations, which are listed first.**

ISLAMIC DEVELOPMENT BANK SHARĪ'AH BOARD*

Chairperson

Sheikh Dr. Hussein Hamed Hassan

Deputy Chairperson

Sheikh Dr. Abdulsattar Abu Ghuddah

H.E. Sheikh Abdullah Bin Sulaiman Al-Meneea	Member
Sheikh Dr. Mohamed Raougui	Member
Sheikh Mohammad Ali Taskhiri	Member
Sheikh Dr. Muhammad Syafii Antonio	Member
Sheikh Muhammad Taqi Al-USmani	Member

*In alphabetical order

SECRETARIAT, ISLAMIC FINANCIAL SERVICES BOARD

Dr. Bello Lawal Danbatta	Secretary-General
Mr. Zahid Ur Rehman Khokher (until 31 December 2018)	Assistant Secretary-General
Dr. Jamshaid Anwar Chattha (until 30 August 2019)	Assistant Secretary-General
Mr. Prasanna Seshachellam	Consultant
Mr. Sani Tazara Muhammad	Member of the Secretariat, Technical and Research

Table of Contents

SECTION 1: GENERAL CONSIDERATIONS.....	4
1.1 INTRODUCTION.....	4
1.2 PURPOSE AND OBJECTIVES.....	6
1.3 SCOPE OF APPLICATION.....	6
1.4 IMPLEMENTATION DATE.....	7
1.5 SPECIFICITIES OF ISLAMIC FINANCIAL INSTRUMENTS	7
1.6 STRUCTURE OF THE STANDARD.....	8
SECTION 2: CAPITAL ADEQUACY AND MACROPRUDENTIAL MEASURES	11
2.1 CAPITAL ADEQUACY REQUIREMENT	11
2.2 CALCULATION OF CAR	12
2.3 CAPITAL CONSERVATION BUFFER	14
2.3.1 INTRODUCTION.....	14
2.3.2 THE FRAMEWORK	14
2.3.3 CAPITAL CONSERVATION RATIOS.....	16
2.3.4 CAPITAL CONSERVATION PLAN.....	17
2.4 COUNTERCYCLICAL BUFFER	18
2.4.1 FACTORS LEADING TO PROCYCLICALITY.....	18
2.4.2 PROCYCLICALITY IN ISLAMIC FINANCE	19
2.4.3 PROCYCLICALITY IN EMERGING MARKETS	20
2.4.4 THE FRAMEWORK	22
2.5 LEVERAGE RATIO	24
2.5.1 FACTORS LEADING TO LEVERAGE.....	24
2.5.1.1 LEVERAGE IN ISLAMIC FINANCE.....	24
2.5.1.2 COMPUTATIONAL DETAILS	25
2.5.1.3 CAPITAL MEASURE.....	26
2.5.1.4 EXPOSURE MEASURE.....	26
2.5.1.5 ON-BALANCE SHEET ITEMS	28
2.5.1.6 SHARI'AH-COMPLIANT HEDGING EXPOSURE.....	29
2.5.1.7 SHARI'AH-COMPLIANT ALTERNATIVES TO SFTs.....	29
2.5.1.8 OFF-BALANCE SHEET ITEMS.....	29
2.5.2 ADDITIONAL SUPERVISORY GUIDANCE	30
2.6 DOMESTIC SYSTEMICALLY IMPORTANT BANKS.....	31
1.6.1 2.6.1 Preamble	31
1.6.2 2.6.2 The Rationale for Taking Additional Policy Measures	31
1.6.3 2.6.3 Assessment Methodology	33
1.6.4 2.6.4 Requirement for Higher Loss Absorbency	34
1.6.5 2.6.5 Other Measures.....	35
2.7 ISLAMIC WINDOW OPERATIONS	37
2.7.1 BACKGROUND.....	37
2.7.2 ISLAMIC WINDOWS WITH PARENT IN THE SAME JURISDICTION.....	37
2.7.3 ISLAMIC WINDOWS WITH PARENT IN ANOTHER JURISDICTION	39
SECTION 3: REGULATORY CAPITAL	41
3.1 COMPONENTS OF CAPITAL	41
3.1.1 COMMON EQUITY TIER 1 CAPITAL.....	41
3.1.2 ADDITIONAL TIER 1 CAPITAL	44
3.1.3 TIER 2 (T2) CAPITAL	46
3.1.4 TREATMENT OF PSIA, PER AND IRR.....	48
3.1.5 REGULATORY ADJUSTMENTS AND DEDUCTIONS	49
SECTION 4: PRINCIPLES FOR MINIMUM CAPITAL REQUIREMENTS.....	53
4.1 CREDIT RISK	53
4.1.1 SYSTEMS AND CONTROLS	53
4.1.2 TREATMENT OF INDIVIDUAL EXPOSURES	54
4.1.3 CALCULATION OF RISK-WEIGHTED ASSETS.....	55
4.1.3.1 EXPOSURES TO SOVEREIGNS AND CENTRAL BANKS.....	56
4.1.3.2 EXPOSURES TO NON-CENTRAL GOVERNMENT PUBLIC-SECTOR ENTITIES.....	57
4.1.3.3 EXPOSURES TO MULTILATERAL DEVELOPMENT BANKS.....	57
4.1.3.4 EXPOSURES TO BANKS AND OTHER IIFS.....	59

4.1.3.4.1	RISK WEIGHT DETERMINATION.....	60
4.1.3.5	EXPOSURES TO SECURITIES FIRMS AND OTHER FINANCIAL INSTITUTIONS.....	64
4.1.3.6	EXPOSURES TO CORPORATES.....	64
4.1.3.6.1	GENERAL CORPORATE EXPOSURES.....	65
4.1.3.6.2	SPECIALISED FINANCING.....	66
4.1.3.7	RETAIL EXPOSURES.....	68
4.1.3.7.1	REGULATORY RETAIL PORTFOLIO.....	69
4.1.3.7.2	REAL ESTATE PORTFOLIO.....	70
4.1.3.7.2.1	RESIDENTIAL REAL ESTATE(RRE) PORTFOLIO.....	71
4.1.3.7.2.2	EXPOSURES SECURED BY COMMERCIAL REAL ESTATE.....	74
4.1.3.8	OFF-BALANCE SHEET EXPOSURES.....	76
4.1.3.9	EXPOSURES IN INVESTMENTS MADE UNDER PROFIT-SHARING MODES.....	77
4.1.3.9.1	COMMERCIAL ENTERPRISE TO UNDERTAKE A BUSINESS VENTURE.....	78
4.1.3.9.2	DIMINISHING MUSHĀRAKAH.....	80
4.1.3.9.3	EQUITY INVESTMENTS IN A COMPANY OR AN ISLAMIC COLLECTIVE INVESTMENT SCHEME NOT HELD FOR SHORT-TERM RESALE OR TRADING PURPOSES.....	82
4.1.3.9.4	A SPECIFIED PROJECT.....	82
4.1.3.9.5	MUSHĀRAKAH WITH IJĀRAH OR MURĀBAHAH SUBCONTRACT.....	83
4.1.3.10	DEFAULTED EXPOSURES.....	84
4.1.3.11	OTHER ASSETS.....	85
4.1.4	IMPLEMENTATION CONSIDERATIONS IN JURISDICTIONS THAT ALLOW USE OF EXTERNAL RATINGS FOR REGULATORY PURPOSES.....	86
4.1.4.1	RECOGNITION OF RATINGS BY ECAI.....	86
4.1.4.2	MULTIPLE EXTERNAL RATINGS.....	89
4.1.4.3	DETERMINATION OF WHETHER AN EXPOSURE IS RATED: ISSUE-SPECIFIC AND ISSUER RATINGS... ..	89
4.1.4.4	DOMESTIC CURRENCY AND FOREIGN CURRENCY RATINGS.....	90
4.1.4.5	SHORT-TERM/LONG-TERM RATINGS.....	90
4.1.5	CREDIT RISK MITIGATION TECHNIQUES.....	91
4.1.5.1	TYPES OF COLLATERAL.....	96
4.1.5.2	RISK MITIGATION APPROACHES.....	97
4.1.5.2.1	SIMPLE APPROACH.....	97
4.1.5.2.2	COMPREHENSIVE APPROACH.....	98
4.1.5.3	MATURITY MISMATCH.....	103
4.1.5.4	CREDIT RISK MITIGATION FOR MUḌĀRABAḤ CLASSIFIED AS EQUITY EXPOSURES.....	104
4.1.5.5	TREATMENT OF AN EXPOSURE COVERED BY MULTIPLE CRM TECHNIQUES.....	105
4.2	MARKET RISK.....	106
4.2.1	INTRODUCTION.....	106
4.2.2	TRADING BOOK.....	107
4.2.2.1	SCOPE OF THE TRADING BOOK.....	107
4.2.2.2	ALLOCATION OF POSITIONS/ITEMS TO THE REGULATORY BOOKS.....	107
4.2.2.3	POWERS OF THE RSAs.....	109
4.2.2.4	DOCUMENTATION OF INSTRUMENT DESIGNATION.....	109
4.2.2.5	RESTRICTIONS ON MOVING INSTRUMENTS BETWEEN THE REGULATORY BOOKS.....	110
4.2.2.6	TREATMENT OF INTERNAL RISK TRANSFERS.....	111
4.2.2.7	INTERNAL RISK TRANSFER OF CREDIT AND EQUITY RISK FROM BANKING BOOK TO TRADING BOOK.....	112
4.2.2.8	INTERNAL RISK TRANSFER OF GENERAL PROFIT RATE RISK FROM BANKING BOOK TO TRADING BOOK	113
4.2.2.9	INTERNAL RISK TRANSFERS WITHIN THE SCOPE OF APPLICATION OF THE MARKET RISK CAPITAL REQUIREMENT.....	114
4.2.3	CALCULATION OF MARKET RISK CAPITAL REQUIREMENTS.....	114
4.2.4	SIMPLIFIED STANDARDISED APPROACH.....	116
4.2.5	GUIDANCE ON VALUATION PRACTICES.....	117
4.2.6	MEASURING MARKET RISK.....	118
4.2.6.1	EQUITY POSITION RISK.....	119
4.2.6.1.1	SPECIFIC RISK.....	119
4.2.6.1.2	GENERAL MARKET RISK.....	119
4.2.6.2	PROFIT RATE RISK IN TRADING POSITIONS IN SUKŪK.....	119
4.2.6.2.1	SPECIFIC RISK.....	120

4.2.6.2.2	GENERAL MARKET RISK	121
4.2.6.2.2.1	MATURITY METHOD.....	122
4.2.6.2.2.2	DURATION METHOD	123
4.2.6.3	FOREIGN EXCHANGE RISK.....	126
4.2.6.3.1	MEASURING AN EXPOSURE IN A SINGLE CURRENCY AND AN OPEN POSITION IN A UNILATERAL BINDING PROMISE TO BUY OR SELL GOLD AND SILVER	127
4.2.6.3.2	MEASURING THE FOREIGN EXCHANGE RISK IN A PORTFOLIO	128
4.2.6.4	COMMODITIES AND INVENTORY RISK.....	128
4.3	OPERATIONAL RISK	131
4.3.1	THE STANDARDISED APPROACH	134
4.3.1.1	THE BUSINESS INDICATOR.....	134
4.3.1.2	THE BUSINESS INDICATOR COMPONENT	135
4.3.1.3	THE INTERNAL LOSS MULTIPLIER	136
4.3.1.4	APPLICATION OF THE STANDARDISED APPROACH WITHIN A GROUP	137
4.3.1.5	MINIMUM STANDARDS FOR THE USE OF LOSS DATA UNDER THE SA	137
4.3.1.6	GENERAL CRITERIA ON LOSS DATA IDENTIFICATION, COLLECTION AND TREATMENT	138
4.3.1.7	SPECIFIC CRITERIA ON LOSS DATA IDENTIFICATION, COLLECTION AND TREATMENT	139
4.3.1.7.1	BUILDING OF THE SA LOSS DATA SET.....	139
4.3.1.7.2	GROSS LOSS, NET LOSS AND RECOVERY DEFINITIONS	139
4.3.1.7.3	EXCLUSION OF LOSSES FROM THE LOSS COMPONENT.....	141
4.3.1.7.4	EXCLUSIONS OF DIVESTED ACTIVITIES FROM THE BI	142
4.3.1.7.5	INCLUSION OF LOSSES AND BI ITEMS RELATED TO MERGERS AND ACQUISITIONS	142
4.3.1.8	DISCLOSURE.....	142
4.3.1.9	SHARĪ AH NON-COMPLIANCE RISK	142
4.3.1.9.1	OPERATIONAL RISK FEATURES OF SHARĪ AH-COMPLIANT MODES OF FINANCING AND INVESTMENT.....	143
4.4	PROFIT-SHARING INVESTMENT ACCOUNTS	147
4.4.1	TYPES AND NATURE OF PSIA	147
4.4.2	ADJUSTMENT TO THE CAPITAL RATIO DENOMINATOR.....	148
4.4.3	SMOOTHING PRACTICES.....	149
4.4.4	DISPLACED COMMERCIAL RISK.....	150
4.4.5	DETERMINATION OF ALPHA (A).....	151
SECTION 5: CAPITAL REQUIREMENTS FOR ISLAMIC FINANCING AND INVESTMENT		
ASSETS		153
5.1	MURĀBAHAH AND MURĀBAHAH FOR THE PURCHASE ORDERER.....	153
5.1.1	INTRODUCTION.....	153
5.1.2	MURĀBAHAH AND NON-BINDING MPO	153
5.1.3	BINDING MPO	154
5.1.4	COLLATERALISATION	154
5.1.5	CREDIT RISK.....	155
5.1.5.1	MURĀBAHAH AND NON-BINDING MPO	155
5.1.5.2	BINDING MPO	155
5.1.5.3	EXCLUSIONS.....	156
5.1.5.4	PREFERENTIAL RW.....	156
5.1.6	MARKET RISK	156
5.1.6.1	MURĀBAHAH AND NON-BINDING MPO	156
5.1.6.2	BINDING MPO	157
5.1.7	SUMMARY OF CAPITAL REQUIREMENTS AT VARIOUS STAGES OF THE CONTRACT	157
A.	MURĀBAHAH AND NON-BINDING MPO	157
B.	BINDING MPO	158
5.2	COMMODITY MURĀBAHAH TRANSACTIONS.....	159
5.2.1	INTRODUCTION.....	159
5.2.2	CAPITAL REQUIREMENTS.....	159
5.2.2.1	CREDIT RISK	160
5.2.2.2	MARKET RISK.....	160
5.2.3	SUMMARY OF CAPITAL REQUIREMENTS.....	161
5.3	SALAM	162
5.3.1	INTRODUCTION.....	162
5.3.2	CREDIT RISK.....	163

5.3.2.1	EXCLUSIONS.....	163
5.3.2.2	APPLICABLE PERIOD.....	163
5.3.2.3	NO OFFSETTING ARRANGEMENT BETWEEN CREDIT EXPOSURES OF SALAM AND PARALLEL SALAM	163
5.3.3	MARKET RISK.....	163
5.3.4	SUMMARY OF CAPITAL REQUIREMENTS AT VARIOUS STAGES OF THE CONTRACT.....	164
5.4	ISTISNĀ`	166
5.4.1	INTRODUCTION.....	166
5.4.2	PRINCIPLES OF ISTISNĀ`.....	166
5.4.3	ROLES AND EXPOSURE OF IIFS IN AN ISTISNĀ` CONTRACT.....	166
5.4.4	CAPITAL ADEQUACY REQUIREMENTS.....	168
5.4.4.1	IIFS AS A SELLER (AL-SANI') IN AN ISTISNĀ` CONTRACT.....	168
1.7	CREDIT RISK.....	169
1.8	MARKET RISK.....	170
5.4.4.2	IIFS AS A BUYER (AL-MUSTASNI') IN AN ISTISNĀ` CONTRACT.....	171
1.9	CREDIT RISK.....	171
1.10	MARKET RISK.....	172
5.4.5	SUMMARY OF CAPITAL REQUIREMENTS AT VARIOUS STAGES OF THE CONTRACT.....	173
5.4.5.1	IIFS AS A SELLER (AL-SANI') IN AN ISTISNĀ` CONTRACT.....	173
5.4.5.2	IIFS AS A BUYER (AL-MUSTASNI') IN AN ISTISNĀ` CONTRACT.....	175
5.5	IJĀRAH AND IJĀRAH MUNTAHIA BITTAMLĪK	178
5.5.1	INTRODUCTION.....	178
5.5.2	OPERATING IJĀRAH.....	178
5.5.3	IMB.....	179
5.5.4	CREDIT RISK.....	180
5.5.4.1	OPERATING IJĀRAH.....	180
5.5.4.2	IMB.....	180
5.5.4.3	EXCLUSIONS.....	181
5.5.4.4	PREFERENTIAL RISK WEIGHT.....	181
5.5.5	MARKET RISK.....	181
5.5.5.1	OPERATING IJĀRAH.....	182
5.5.5.2	IMB.....	182
5.5.6	SUMMARY OF CAPITAL REQUIREMENTS AT VARIOUS STAGES OF THE CONTRACT.....	182
A.	OPERATING IJĀRAH.....	183
5.6	MUSHĀRAKAH AND DIMINISHING MUSHĀRAKAH	185
5.6.1	INTRODUCTION.....	185
5.6.2	MUSHĀRAKAH.....	185
5.6.3	DIMINISHING MUSHĀRAKAH.....	187
5.6.4	EQUITY POSITION RISK.....	187
5.6.5	SUMMARY OF CAPITAL REQUIREMENTS FOR MUSHĀRAKAH CATEGORIES.....	189
5.7	MUDĀRABAH	191
5.8	QARD	197
5.8.1	INTRODUCTION.....	197
5.8.2	COLLATERALISATION.....	197
5.8.3	CREDIT RISK.....	197
5.8.4	MARKET RISK.....	198
5.8.5	SUMMARY OF CAPITAL REQUIREMENTS FOR QARD-BASED LENDING.....	198
5.9	WAKĀLAH	199
5.9.1	INTRODUCTION.....	199
5.9.2	CAPITAL REQUIREMENTS.....	200
5.9.3	SUMMARY OF CAPITAL REQUIREMENTS FOR WAKĀLAH CATEGORIES.....	203
SECTION 6: TREATMENT OF EXPOSURES RELATED TO SUKŪK		204
6.1	INTRODUCTION	204
6.2	FEATURES OF SUKŪK STRUCTURES	204
6.2.1	SECURITISATION PROCESS FOR SUKŪK STRUCTURING.....	205
6.2.2	PARTIES IN A SUKUK STRUCTURE.....	207
6.2.3	COLLATERAL SECURITY STRUCTURE.....	208
6.2.4	CHARACTERISTICS OF TRUE SALE AND REPURCHASE OF ASSETS.....	209
6.2.5	SPECIAL-PURPOSE ENTITY.....	210

6.2.6	CREDIT ENHANCEMENT	211
6.2.6.1	OVER-COLLATERALISATION.....	212
6.2.6.2	EXCESS SPREAD.....	212
6.2.6.3	CASH COLLATERAL.....	212
6.2.6.4	212	
6.2.6.4	TAKĀFUL PROTECTION.....	212
6.2.6.5	CLASSIFICATION OF CREDIT ENHANCEMENT.....	213
6.2.7	CREDIT RATING	213
6.2.8	ASSETS IN SUKUK STRUCTURES.....	213
6.2.9	OPERATIONAL REQUIREMENTS FOR RECOGNITION OF RISK TRANSFERENCE (ASSET DERECOGNITION CRITERIA).....	214
6.2.10	OPERATIONAL REQUIREMENTS FOR CREDIT ANALYSIS.....	217
6.2.11	TREATMENT FOR REGULATORY CAPITAL PURPOSES FOR SUKUK AND SECURITISATION EXPOSURES.....	218
6.2.12	CAPITAL REQUIREMENTS FOR SUKUK.....	219
6.2.13	SALAM SUKUK	221
6.2.14	ISTISNĀ` SUKUK.....	222
6.2.15	IJĀRAH AND IMB SUKUK.....	223
6.2.16	MUSHĀRAKAH SUKUK.....	224
6.2.17	MUDĀRABAH SUKUK.....	224
6.2.18	WAKĀLAH SUKUK.....	225
6.2.19	MURĀBAHAH SUKUK.....	226
6.2.20	EXCLUSIONS.....	227
6.2.21	CAPITAL REQUIREMENTS WHERE THE IIFS IS THE ORIGINATOR	227
6.2.22	TREATMENT OF LIQUIDITY FACILITIES.....	227
6.2.23	TREATMENT OF CREDIT RISK MITIGATION FOR SECURITISATION EXPOSURES.....	228
6.2.24	TREATMENT OF CREDIT ENHANCEMENT PROVIDED BY AN ISSUER OR ORIGINATOR.....	229
6.2.25	CAPITAL REQUIREMENTS WHERE THE IIFS IS THE CREDIT ENHANCER	229
6.2.26	TREATMENT OF CREDIT ENHANCEMENT PROVIDED BY A STRUCTURE	229
1.11	RISK WEIGHTS.....	229
6.2.27	CREDIT RISK MITIGATION FOR SECURITISATION EXPOSURES.....	229
6.2.27.1	ELIGIBLE CREDIT RISK MITIGATION TECHNIQUES FOR PROTECTION BUYERS	229
SECTION 7:	REAL ESTATE ACTIVITIES	231
7.1	CURRENT REGULATORY ENVIRONMENT OF REAL ESTATE ACTIVITIES	231
7.2	DEFINITIONS	232
7.3	RISK EXPOSURES IN REAL ESTATE ACTIVITIES	233
7.3.1	INDIRECT EXPOSURE IN REAL ESTATE.....	234
7.3.1.1	TREATMENT OF REAL ESTATE INVESTMENT EXPOSURES THROUGH JOINT VENTURE OR EQUITY PARTICIPATION.....	234
7.3.1.2	TREATMENT OF INVESTMENT EXPOSURES IN REAL ESTATE SUBSIDIARIES OF IIFS	235
7.3.1.3	TREATMENT OF REAL ESTATE TAKEN AS COLLATERAL.....	235
7.4	SUPERVISION OF REAL ESTATE ACTIVITIES.....	236
7.5	RISK-WEIGHTING OF REAL ESTATE EXPOSURES	236
7.5.1	REAL ESTATE FINANCING	236
7.5.2	REAL ESTATE INVESTMENT.....	237
7.6	VALUATION OF REAL ESTATE ACTIVITIES.....	238
Appendix A:	Leverage ratio	239
Appendix B:	Definition of Business Indicator Components	247
Appendix C:	Operational Guidelines for Countercyclical Buffer	252
Appendix D:	Supervisory Slotting Criteria for <i>Istisnā`</i> in Project Finance and <i>Mushārah</i> in a Business Venture.....	261
Appendix E:	Supervisory Slotting Criteria for Diminishing <i>Mushārah</i> in Real Estate.....	269
Appendix F:	Factors in Determining Domestic Systemically Important Banks	274

ABBREVIATIONS

AAOIFI	Accounting and Auditing Organization for Islamic Financial Institutions
BCBS	Basel Committee on Banking Supervision
BI	Business Indicator
BIC	Business indicator component
BOT	Build, operate and transfer
CAR	Capital adequacy ratio
CCyB	Countercyclical buffer
CCF	Credit conversion factor
CCR	Counterparty credit risk
CDOs	Collateralised debt obligations
CMF	Commodity <i>Murābahah</i> financing
CMLF	Commodity <i>Murābahah</i> for liquid funds
CMT	Commodity <i>Murābahah</i> transactions
CRE	Commercial real estate
CRM	Credit risk mitigation
DCR	Displaced commercial risk
DTAs	Deferred tax assets
ECA	Export credit agencies
ECAI	External credit assessment institution
FTV	Financing-to-value ratio
GDP	Gross domestic product
GN	Guidance Note
GNI	Gross national income
HJ	<i>Hamish Jiddiyah</i>
HLA	Higher loss absorbency
IAH	Investment account holders
IAIS	International Association of Insurance Supervisors
IAS	International Accounting Standards
ICAAP	Internal capital adequacy assessment process
IDB	Islamic Development Bank
IFSB	Islamic Financial Services Board

IFSB-1	Guiding Principles of Risk Management for IIFS
IFSB-2	Capital Adequacy Standard for IIFS
IFSB-4	Disclosures to Promote Transparency and Market Discipline for IIFS
IFSB-5	Guidance on Key Elements in the Supervisory Review Process for IIFS
IFSB-7	Capital Adequacy Requirements for <i>Sukūk</i> , Securitisations and Real Estate Investment
IFSB-15	Revised Capital Adequacy Standard for Institutions Offering Islamic Financial Services (Excluding Islamic Insurance [Takaful] and Islamic Collective Investment Schemes)
IFSB-22	Revised Standard on Disclosures to Promote Transparency and Market Discipline
IFSB GN-1	Guidance Note on Recognition of Ratings by External Credit Assessment Institutions on <i>Shari'ah</i> -Compliant Financial Instruments
IFSB GN-2	Guidance Note in Connection with the Risk Management and Capital Adequacy Standards: Commodity <i>Murābahah</i> Transactions
IFSB GN-3	Guidance Note on the Practice of Smoothing the Profits Payout to Investment Account Holders
IFSB GN-4	Guidance Note in Connection with the IFSB Capital Adequacy Standard: The Determination of Alpha in the Capital Adequacy Ratio for IIFS
IFSI	Islamic financial services industry
IIFS	Institution(s) offering Islamic financial services (excluding Islamic insurance/ <i>Takāful</i> institutions and Islamic collective investment schemes)
IMB	<i>Ijārah Muntahia Bittamlīk</i> (also known as <i>Ijārah wa Iqtinā`</i>)
IOSCO	International Organization of Securities Commissions
IRB	Internal rating-based approach (for market risk)
IRR	Investment risk reserve
LGD	Loss-given default
LOB	Line of business
MDB	Multilateral development bank
MPO	<i>Murābahah</i> for purchase orderer
NPF	Non-performing financing
OTC	Over-the-counter
PD	Probability of default
PER	Profit equalisation reserve
PL	Promise to lease

PP	Promise to purchase
PSE	Public sector enterprise/entity
PSIA	Profit-sharing investment account
PTI	Payment-to-income (ratio)
RCASWG	Revised Capital Adequacy Standard Working Group
RIAH	Restricted investment account holders
RPSIA	Restricted profit-sharing investment account
RRE	Residential real estate
RWs	Risk weights
RWAs	Risk-weighted assets
SAGs	Standards and guidelines
SIB	Systemically important bank
SME	Small and medium enterprise
SPE	Special-purpose entity
SSB	<i>Shari'ah</i> Supervisory Board
TSA	The standardised approach (for operational risk)
UIAH	Unrestricted investment account holders
UPSIA	Unrestricted profit-sharing investment account
WIP	Work-in-process

Bismillahirrahmanirrahim

Allahumma salli wasallim 'ala Sayyidina Muhammad wa'ala alihi wasahbihi

SECTION 1: GENERAL CONSIDERATIONS

1.1 Introduction

1. The Islamic Financial Services Board (IFSB) issued its first Capital Adequacy Standard (IFSB-2) for institutions offering Islamic financial services (IIFS) in December 2005. IFSB-2 addressed the specific structure and contents of the Shari'ah-compliant products and services offered by the IIFS and provided detailed guidance on calculating capital adequacy requirements for IIFS offering these products and services. The standard was supplemented with a number of other publications in subsequent years related to the calculation of the capital adequacy ratio (CAR) for IIFS, in order either to cover additional products and services offered by IIFS or to provide further guidance on the application of various aspects of the current IFSB standards.

2. Consequent to the financial and economic crisis that began in 2007, the global regulatory landscape witnessed a number of developments which resulted in the issuance of numerous standards, revised norms and guidance by global standard-setting bodies such as the Financial Stability Board (FSB), the Basel Committee on Banking Supervision (BCBS), the International Organization of Securities Commissions (IOSCO) and the International Association of Insurance Supervisors (IAIS). The changes introduced by the BCBS were the most impactful on the IFSB's capital adequacy standards. These changes necessitated the review of the IFSB's capital adequacy standards and their related publications.

3. Subsequently, the IFSB issued IFSB-15 as an enhanced and consolidated capital adequacy standard for IIFS. In addition to aligning the IFSB's capital adequacy standards with global capital standards, IFSB-15 covers some areas not previously considered, as outlined below:

- a. It provides detailed guidelines outlining the basic features and criteria required for various components of capital to be applicable to IIFS, as well as regulatory adjustments and deductions attached to these components.
- b. It further expands the guidance provided in the earlier IFSB Standards and Guidelines (SAG) related to calculation of credit risk, market risk and operational risk, in order to incorporate the enhancements in the global capital standards and cover some areas not previously included: for instance, credit risk mitigation was

restructured to cover new credit risk mitigation techniques; market and operational risks were updated; and more comprehensive guidelines were provided on the treatment of profit-sharing investment accounts (PSIAs) and adjustment in the CAR.

- c. It provides detailed guidance that sets out the minimum CAR for both credit and market risks for each of the Shari'ah-compliant financing and investment instruments.

4. In December 2017, BCBS issued the Basel III final package of reforms wherein a significant amount of changes were introduced to the earlier Basel III framework. The 2017 reforms seek to restore credibility in the calculation of risk-weighted assets (RWAs) and improve the comparability of banks' capital ratios. As part of their efforts to ensure a prudent and consistent calculation of RWAs, the BCBS reforms made significant enhancements to all the Pillar 1 risks. The changes to the credit risk framework were characterised by an enhanced risk sensitivity while keeping the approaches sufficiently simple, and reduced reliance on external credit ratings by emphasising the need for banks to conduct sufficient due diligence when using external ratings. They also provided a detailed non-ratings-based approach for jurisdictions that cannot or do not wish to rely on external credit ratings.

5. The market risk framework underwent a significant revision, first with the fundamental review of the trading book which resulted in the issuance of the standardised approach (sensitivities-based method) in January 2016. This new approach was considered too complex and impracticable for smaller banks, which resulted in the issuance of a simplified alternative standardised approach. The operational risk framework was also streamlined and simplified. The BCBS replaced the four current approaches with a single standardised approach and tried to enhance the risk sensitivity of the framework by combining a refined measure of gross income with a bank's own internal loss history over 10 years. The BCBS also introduced a leverage ratio buffer for the global systemically important banks (G-SIBs) and refined the exposure measure used in calculation of the leverage ratio.

6. Given the new enhancements and significant developments related to capital adequacy requirements and other risk metrics by the BCBS as highlighted above, and developments in the Islamic financial services Industry (IFSI) as well as other global regulatory landscapes since the issuance of IFSB-15 in December 2013 and their possible implications for the IFSB's capital standards, the Council of the IFSB, in its 32nd meeting held in Kuwait City, Kuwait, on 3 May 2018, approved the revision of the current capital adequacy standard (IFSB-15) and the formation of the Revised Capital Adequacy Standard Working

Group (RCASWG). The RCASWG is mandated to prepare a revised standard on capital adequacy for IIFS (hereinafter to be referred to as “the Standard”) that will be aligned to the latest developments in the IFSI and global regulatory best practices.

1.2 Purpose and Objectives

7. The objective of the Standard is to align the IFSB SAGs with global capital standards. The intended enhancements to IFSB-15 are aimed at making it more comprehensive and robust and in tune with global best practice in terms of regulatory capital adequacy framework for institutions offering Islamic banking services. The incorporation of global best practices in the Standard will ensure the provision of a level playing field to IIFS vis-à-vis conventional financial institutions subjected to a capital regulatory framework. The Standard provides enhanced guidance to the regulatory and supervisory authorities (RSAs), with the necessary flexibility for its application across regions in relation to IIFS ranging in size from small to fairly large and sophisticated. The main objectives of the Standard are as follows:

- a. to assist the IIFS and their supervisory authorities in the implementation of a capital adequacy framework that will ensure effective coverage of risk exposures of the IIFS and allocation of appropriate capital to cover these risks, thus enhancing the resilience of the IFSI;
- b. to provide enhanced guidance on the maintenance of high-quality regulatory capital components by IIFS that comply with Sharī`ah rules and principles;
- c. to enhance the guidance provided by the earlier IFSB capital adequacy standards in addressing the CAR of various risk exposures related to Sharī`ah-compliant products and services offered by IIFS;
- d. to provide enhanced guidance on the capital adequacy treatment of an IIFS’s involvement in *sukūk* issuances and securitisation processes in various capacities;
- e. to address some specific concerns in the course of implementation of the earlier IFSB capital adequacy standards and guidance notes; and
- f. to adapt international best practices, as well as current and emerging standards, relating to capital adequacy for IIFS.

1.3 Scope of Application

8. The Standard is primarily intended to serve banking institutions offering Islamic financial services. These IIFS include, but are not limited to: fully fledged Islamic commercial banks; Islamic investment banks/companies; Islamic banking subsidiaries of conventional banks; Islamic banking branches/divisions/units of conventional banks (hereinafter

collectively referred to as “Islamic windows”¹); and such other financial institutions as may be determined by the respective supervisory authority. In addition, the risk-weighting methodology set out in the Standard may be applied to Sharīʿah-compliant financing assets held by Islamic window operations that are not self-contained or by other institutions holding such assets.

9. The Standard will be applicable to any IIFS that falls within the scope as stated herein, on a fully consolidated basis at the holding company level within a group or sub-group of IIFS, or on a solo basis, or on both fully consolidated and solo bases as determined by the respective supervisory authority. The Standard is not intended to be applied at the consolidated level to a group or subgroup that consists of entities other than IIFS as defined in the Standard. The application of this Standard by supervisory authorities should be commensurate with the nature, size, complexity and type of products of the IIFS in the jurisdiction.

1.4 Implementation Date

10. The enhancements made to the components of capital, capital conservation buffer (CCB), countercyclical capital buffers (CCyB) and Islamic windows operations are expected to be implemented immediately by the RSAs in their jurisdictions. The enhancements to credit, market and operational risk frameworks, as well as the leverage ratio framework, should be implemented by 1 January 2022. RSAs may consider earlier implementation timelines wherever feasible, taking into account an adequate period for the transposition of this Standard into national supervisory regulations and guidelines for IIFS.

1.5 Specificities of Islamic Financial Instruments

11. Islamic financial instruments are asset-based (*murābahah*, *salam* and *istisnāʿ*, which are based on the sale or purchase of an asset; and *ijārah*, which is based on selling the usufruct of an asset), profit-sharing (*mushārahah* and *muḍārahah*), or *sukūk* (securities), and investment portfolios and funds which may be based on the above assets. In the case of the asset-based instruments, the IIFS’s gross return is the spread between the cost of the asset to the IIFS and the amount that can be recovered from selling or leasing it. Such instruments may therefore involve exposure to market (price) risk in respect of the asset, as well as credit risk in respect of the amount due from the counterparty. In the case of the profit-sharing instruments, *mushārahah* and *muḍārahah*, the exposure is of the nature of an equity position

¹ IFSB-5 defined “Islamic windows” as part of a conventional financial institution (which may be a branch or dedicated unit of that institution) that provides both fund management (investment accounts) as well as financing and investment that are Sharīʿah-compliant. Thus, these windows are potentially self-contained in terms of Sharīʿah-compliant financial intermediation, as the funds generated are invested in Sharīʿah-compliant assets.

not held for trading, similar to an "equity position in the banking book"² as described in the Consolidated Basel Framework and is likewise dealt with under credit risk, except in the case of investments (normally short-term) in assets for trading purposes, which are dealt with under market risk.

12. For these reasons, the Standard maintains the matrix format of IFSB-15 so that the risk-weighted assets (RWAs) and consequently capital charges applicable in respect of both the credit risk and the market risk exposures arising from a given type of financial instrument are dealt with under the heading of that instrument, as indicated below.

1.6 Structure of the Standard

13. The Standard is an enhancement of IFSB-15 and therefore maintains largely the layout of IFSB-15 without much modification. The revised Standard is divided into seven sections as follows:

- a. Section 1 provides the background and objectives, as well as the scope and coverage, of the Standard. Further, it specifies the proposed date of starting implementation of the Standard. It also includes a brief overview of the specificities of Islamic financial instruments and the structure of the Standard.
- b. Section 2 provides a brief description of the rationale for capital adequacy requirements and highlights the two formulas (the standard formula and the supervisory discretion formula) for calculating the CAR. The section also highlights the macroprudential measures introduced to contain the impact of systemic and contagious risks, and the leverage ratio.
- c. Section 3 outlines the basic features and eligibility criteria for various components of the regulatory capital which can be held by IIFS, as well as regulatory adjustments and deductions attached to these components. The section provides enhanced criteria for identifying eligible regulatory capital instruments under Additional Tier 1 and Tier 2, in the light of Shari'ah rules and principles as well as for meeting BCBS criteria.
- d. Section 4 provides guidance on how an IIFS can determine the total risk-weighted assets of its asset portfolio by aggregating all the RWAs arising from credit, market and operational risk exposures in its asset portfolio. This section includes detailed and enhanced guidance for IIFS and incorporates the recent enhancements of the global capital standards. Lastly, the subsection on profit-sharing investment accounts

² See paragraph CRE20.57 of the Consolidated Basel Framework.

has been enhanced to provide a more comprehensive guideline on the treatment of PSIAs and adjustments in the CAR.

- e. Section 5 includes an enhanced text on the minimum capital adequacy requirements for both credit and market risks for each of the Sharī'ah-compliant financing and investment instruments:
 - (i) *murābahah* and *murābahah* for the purchase orderer;
 - (ii) commodity *murābahah* transactions (CMT);
 - (iii) *salam* and parallel *salam*;
 - (iv) *istisnā`* and parallel *istisnā`*;
 - (v) *ijārah* and *ijārah muntahia bittamlīk*;
 - (vi) *mushārahah*, including diminishing *mushārahah*;
 - (vii) *muḍārabah*;
 - (viii) *qarḍ*; and
 - (ix) *wakālah*.
- f. Section 6 provides enhanced guidance on capital adequacy treatment of sukūk and securitisation exposures of IIFS in IFSB-15 and incorporates global regulatory developments related to originating, issuing and holding sukūk in various stages of the securitisation process.
- g. Section 7 provides enhanced capital adequacy requirements for exposures of IIFS related to real estate financing and investment activities, when an IIFS utilises its own (shareholders') funds or those generated from PSIA and other fund providers.

14. The Standard does not cover internal rating-based (IRB) approaches for the calculation of capital requirements in respect of credit risks and market risks, similar to the approach followed in IFSB-15. However, RSAs, at their discretion, may allow the IIFS in their jurisdiction to employ such advanced approaches provided that they are satisfied, inter alia, with: (a) the robustness of the internal models; (b) the availability of sufficient and reliable data; (c) their own internal capabilities and resources to review, approve and monitor the performance of the models used; and (d) fulfilment of other related requirements.

15. The Sharī`ah rules and principles mentioned for explanatory purposes in the Standard do not encompass all the practices followed by IIFS in different jurisdictions, and the references to these rules and principles in this context are not intended to indicate that the IFSB has any opinion as to whether the products and services offered by the IIFS are in accordance with Sharī`ah rules and principles. In this regard, IIFS are expected to fulfil the requirements set by their supervisory authorities and Sharī`ah boards in determining and ensuring that their activities are in compliance with the Sharī`ah rules and principles.

SECTION 2: CAPITAL ADEQUACY AND MACROPRUDENTIAL MEASURES

2.1 Capital Adequacy Requirement

16. Regulatory capital requirements were introduced as a prudential measure with the aim of ensuring that risk exposures of a financial institution are adequately supported by high-quality capital that absorbs losses on a going concern basis. This ensures that financial institutions meet their obligations on an ongoing basis as they fall due, while also maintaining the confidence of customers, depositors, creditors and other stakeholders in their dealings with the institution and thereby promoting the resilience and stability of financial systems around the world. Subsequent enhancements to regulatory capital requirements also sought to further protect depositors and other senior creditors in a gone concern situation by providing an additional cushion of loss-absorbing capital.

17. The basic regulatory capital requirement ensures that financial institutions maintain a minimum capital adequacy ratio at all times. The CAR is a measurement of a financial institution's available regulatory capital expressed as a percentage of its total risk-weighted assets.

- a. Regulatory capital (RC), as the numerator, comprises two tiers, as follows:
 - i. Tier 1 capital, which comprises Common Equity Tier 1 (CET1) capital and Additional Equity Tier 1 (AT1) capital. Tier 1 capital ensures the absorption of losses on a going-concern basis (see section 3.1.1 for a detailed discussion on this type of regulatory capital) and ensures the continued operation of a viable IIFS.
 - ii. Tier 2 capital can be referred to as the gone-concern capital that is expected to support the absorption of losses in the event of an IIFS becoming unviable or in its winding-up phase. (See section 2.1.3 for a detailed discussion on this type of capital.)
- b. The risk-weighted assets, the denominator, are the sum of all of the IIFS's on-balance sheet and off-balance sheet risk exposures, weighted according to the risk of losses inherent in each of those exposures. For IIFS to ensure compliance with the capital adequacy requirement, the RWA will be the sum of the RWA for credit, market and operational risks. The details of the RWA for these different risk classes are discussed in Section 4 of this Standard.

Thus, the formula for CAR is as follows:

$$\text{CAR} = \frac{\text{Total capital}}{\text{Total risk-weighted assets (Credit risk + Market risk + Operational risk)}}$$

18. The total capital requirements for IIFS shall be not less than 8% of total RWA at all times. IIFS shall meet the following capital thresholds forming part of the total capital requirements referred to above at all times:

- a. CET1 capital must be at least 4.5% of RWA;
- b. Tier 1 capital (CET1 plus AT1) must be at least 6.0% of RWA; and
- c. total capital (Tier 1 capital plus Tier 2 capital) must be at least 8.0% of RWA.

19. In addition, IIFS shall be required to maintain a capital conservation buffer and a countercyclical buffer, as stipulated by their respective RSAs. Details of, and guidance on, these capital buffers are provided in sections 2.3 and 2.4. Furthermore, IIFS that are identified as domestic systemically important banks (D-SIBs) by their RSA will be required to hold additional CET1 capital, as explained in section 2.6. IIFS that are identified as G-SIBs will be subject to specific capital adequacy requirements which are in addition to those specified in this Standard and as set out in regulations issued by their RSA.

2.2 Calculation of CAR

20. An IIFS may be permitted to adopt any of the following formulas for calculation of its CAR by the relevant national RSA:

- (a) *The standard formula:* In the absence of any smoothing³ of the profit payouts to investment account holders (IAHs) by an IIFS, the IIFS is not required to hold regulatory capital to support commercial (i.e. credit or market) risk exposures arising from assets funded by PSIA of those IAHs. This implies that the RWAs funded by such PSIA accounts are excluded in respect of commercial risks in calculating the denominator of the CAR, leaving only operational risk. This is called the "standard formula" and is calculated as follows:

$$\frac{\text{Total capital}}{\text{Total risk-weighted assets (Operational risk)}}$$

³ See Section 4 for details of the rationale and different types of smoothing techniques.

{Total risk-weighted assets⁴ (Credit⁵ + Market risks) Plus: Operational risks
Less:

Risk-weighted assets funded by PSIA⁶ (Credit + Market risks)}

(b) *The supervisory discretion formula:* In jurisdictions where IIFS practise the type of income smoothing for IAH (mainly unrestricted investment account holders, or UIAH) that gives rise to displaced commercial risk (DCR), the RSA should require regulatory capital to be held to support such exposures to DCR. In this approach, commercial risks of assets financed by unrestricted profit-sharing investment accounts (UPSIA) (i.e. the volatility of the returns excluding overall losses) are borne proportionately by both the UIAH and the IIFS. Hence, a proportion of the RWAs funded by UPSIA, denoted by the Greek letter “alpha”, is required to be included in the denominator of the CAR, the permissible value of alpha being subject to the discretion of the relevant national RSA. An RSA may also decide to extend this treatment to restricted profit-sharing investment accounts (RPSIA), provided there is adequate basis to conclude that IAHs holding such RPSIAs are also subject to unconditional profit smoothing. Such risk sharing between IAHs and IIFS gives rise to a *supervisory discretion formula* that is applicable in jurisdictions where the RSA takes the view that IIFS in the jurisdiction are permitted (or in some jurisdictions required) to smooth income to the IAHs in order to mitigate withdrawal risk and the attendant systemic risk. The CAR under this formula is calculated as follows:

Total capital

{Total risk-weighted assets (Credit + Market risks) Plus: Operational risks
Less:
Risk-weighted assets funded by restricted PSIA (Credit + Market risks) Less:
(1 – α)⁷ [Risk-weighted assets funded by unrestricted PSIA (Credit + Market risks)] Less:
α [Risk-weighted assets funded by PER and IRR of unrestricted PSIA⁸ (Credit + Market risks)]}

⁴ Total RWAs include those financed by both restricted and unrestricted PSIA.

⁵ Credit and market risks for on- and off-balance sheet exposures.

⁶ Where the funds are commingled, the RWAs funded by PSIA are calculated based on their pro-rata share of the relevant assets. PSIA balances include profit equalisation reserve (PER) and investment risk reaserve (IRR), or equivalent reserves.

⁷ "Alpha (α)" refers to the proportion of assets funded by unrestricted PSIA which is to be determined by the supervisory authorities. The value of α would therefore vary, based on the supervisory authorities' discretion on a case-by-case basis.

⁸ The relevant proportion of RWAs funded by the PSIA's share of PER and by IRR is deducted from the denominator. The PER has the effect of reducing the DCR, and the IRR has the effect of reducing any future losses on the investment financed by the PSIA.

2.3 Capital Conservation Buffer

2.3.1 Introduction

21. The capital conservation buffer is designed to provide IIFS with an extra layer of capital cushion over its minimum capital requirements to draw on during times of financial and/or economic stress (when losses are likely to be aggravated), thereby avoiding breach of minimum capital requirements.⁹ The additional cushion provided by the CCB helps an IIFS to recover its capital adequacy levels by taking specified capital conservation measures and enables it to obviate regulatory intervention caused by breach of minimum capital requirements as well as to preclude any threats to its franchise and concomitant stresses on its liquidity or contagion risk. The CCB is expressed as a percentage of the total RWAs of the IIFS, identical to the approach for specifying the CAR. An IIFS must meet the CCB requirement by holding the required amount of CET1 capital at all times, in addition to the CET 1 capital it holds to meet its minimum capital requirement specified by its CAR. For the sake of clarity, the CET1 capital held by an IIFS to meet its CAR cannot be used to meet its CCB requirement.

22. If the capital of an IIFS falls below the required CCB level, the relevant IIFS will be subject to various restrictions on discretionary distributions of profits, until its capital is restored to the required level of CCB. In addition, such an IIFS will be required to draw up a "capital conservation plan" with a credible strategy for early replenishment of the buffer and submit it to the relevant RSA for its approval. However, the IIFS will also have the choice of raising additional CET1 capital through new issues instead of internal conservation of capital through reduced profit distributions. This option should be part of the capital conservation plan (see [section 2.3.4](#)) to be submitted to the RSA by the IIFS, and will be subject to supervisory evaluation and approval.

2.3.2 The Framework

23. The capital conservation buffer shall amount to 2.5% of RWAs in addition to the minimum regulatory capital requirements and should comprise only CET1 capital. An IIFS can only use any excess of its CET1 capital after meeting its minimum capital requirements (over and above 4.5–8% of RWA, as the case may be) for the purposes of meeting its CCB.

24. If the capital position of an IIFS falls below the stipulated minimum requirements outlined in paragraph 23, the supervisory authority can apply limitations on some or all of the

⁹ Juan Ramirez (2018): *Handbook of Basel III Capital – Enhancing Bank Capital in Practice*.

following items. Such limitations should not, however, restrict the IIFS from conducting business as usual. The items subject to restrictions include, inter alia:

- (a) dividend payments to holders of common equity;
- (b) share buy-backs;
- (c) discretionary profit distributions to holders of other CET1 instruments; and/or
- (d) discretionary bonus payments to staff, provided this step is not in conflict with any contractual or legal obligations of the IIFS.

25. "Profits" for this purpose should essentially be those qualifying as eligible for inclusion in CET1 capital and thus can contribute to build-up of CET1 capital to restore CCB if they are restricted from distributions. Such profits are distributable (excluding the share of profits payable to PSIA) and are calculated prior to the deduction of elements subject to the restrictions mentioned in paragraph 24 relating to dividends, share buy-backs, distributions to holders of other CET1 instruments, and discretionary staff bonuses. Such profits also include: (a) interim profits not yet included in CET1 that have been generated since the most recent decision on the distribution of profits or any other actions mentioned in paragraph 24; and (b) year-end profits not yet included in CET1 that have been generated since the most recent decision on the distribution of profits or any other actions mentioned in paragraph 24. Any tax payable on the above two items should be deducted in making this calculation. In addition, such profits should be calculated after the deduction of *zakat* and transfers to PER, where applicable. The deduction related to tax should be made on the basis that none of the distributable items mentioned in paragraph 24 have been paid. This means that any tax impact related to such distributions shall be reversed.

26. The application of the CCB requirement will be made at the consolidated group level. Therefore, any constraints on profit distributions mentioned in paragraph 24 & 25 shall be applied at the consolidated group level. In the case of Islamic window operations of conventional banks (as defined in footnote 1), the restrictions will be applied to the bank as a whole. In case the RSAs choose to require that capital be conserved in specific parts of the group, they can opt to apply this buffer on a solo (single entity) basis.

27. If the capital position of an IIFS falls below the CCB requirement, the relevant IIFS cannot use future predictions of recovery or profitability projections as a justification for making any of the types of distributions mentioned in paragraph 24. Furthermore, such an

IIFS should not be allowed to make any distributions out of profits in order to signal its financial strength – for example, its dividend-paying ability.

28. As the CCB must consist of CET1 capital, any capital raised through issuance of sukūk or other capital instruments which do not qualify for inclusion in CET1 capital (as defined in section 3.1.1) cannot be considered to meet the CCB requirement.

2.3.3 Capital Conservation Ratios

29. In order to meet the minimum requirements for CET1 (i.e. 4.5%, as mentioned in section 2.1) and the capital conservation buffer (i.e. 2.5%), an IIFS must have not less than 7.0% of CET1 at all times. If the CET1 level is below this requirement, the IIFS will be subject to restrictions on profit distributions as outlined in paragraph 24; that is, it will be required to “conserve” a specified percentage of profits in the succeeding financial periods, until the CCB is fully restored (i.e. CET is above 7% of total RWAs). The percentage of profits restricted from distributions and used for conserving capital, called the minimum capital conservation ratio, is dependent on the level of CET1 capital ratio (in the CCB range of 4.5% to 7% of RWA), as set out in Table 1.

Table 1

CET 1 Capital Ratio	Minimum Capital Conservation Ratios (as a percentage of profits)
4.5% – ≤5.125%	100
>5.125 % – ≤5.75%	80
>5.75% – ≤6.375%	60
>6.375% – ≤7.0%	40
>7%	0

30. Table 1 shows that when, for example, an IIFS has a CET1 in the range of 5.75% to 6.375%, it will be required to conserve 60% of its profits in the next financial year; that is, its total distributions after adjusting for deductions as defined in paragraph 24 should not amount to more than 40% of its profits.

31. The CET1 ratio used in the determination of the capital conservation ratio referred to in paragraph 29 excludes any amount of CET1 capital used to meet the 8% total capital

requirements. For example, an IIFS with 8% CET1 and no other type of regulatory capital (i.e. AT1 or T2 capital) would meet minimum capital requirements, but would have a zero CCB and therefore be subject to the 100% constraint on profit distributions.

32. If an IIFS wishes to make payouts in excess of the requirement outlined in Table 1, it has the option to raise an amount of new capital equal to the amount required by the minimum capital conservation ratio. The IIFS should outline any such proposal as a part of its capital conservation plan, as delineated in section 2.3.4.

2.3.4 Capital Conservation Plan

33. Where an IIFS fails to meet the required level of capital conservation buffer, it shall prepare a capital conservation plan (hereinafter referred to as “the Plan”) clearly outlining the information mentioned below. The IIFS shall submit the Plan to the relevant RSA within a suitably short time frame to be set by the latter. It is desirable that the IIFS should already have prepared such a plan on a contingency basis. The Plan will include the following:

- a. estimates of income and expenditure and a forecasted balance sheet;
- b. measures to be taken to increase the IIFS’s capital ratios;
- c. a plan and time frame for the increase of capital with the objective of meeting fully the buffer requirement; and
- d. any other information the supervisory authority deems necessary to carry out the assessment required, as indicated in paragraph 34.

34. The supervisory authority shall review and approve the Plan submitted by the IIFS based on its evaluation and satisfaction that, the Plan provides a reasonable basis for conserving or raising sufficient capital that will enable the IIFS to meet the CCB requirements within a period acceptable to the supervisory authority. While reviewing the Plan, the supervisory authority should also evaluate whether the IIFS has deliberately reduced its CET1 so as to operate in the buffer range (i.e. below the CCB requirement) in order to reduce its cost of capital for competitive purposes.

35. If the Plan is not approved, the supervisory authority may take one or more of the following steps, inter alia, as deemed necessary:

- (a) ask the IIFS to revise the Plan and resubmit it within a specified time period;
- (b) require the IIFS to raise new capital to specified levels within specified periods; or
- (c) impose more stringent restrictions on distributions than those required by section 2.3.2.

2.4 Countercyclical Buffer

2.4.1 Factors Leading to Procyclicality

36. In this subsection, some factors leading to procyclicality are discussed, primarily with reference to the conventional banking sector. However, given the business model of IIFs and the fact that they are part of the overall financial system, these factors may have relevance to IIFs' operations, either directly or indirectly.

37. "Procyclicality of a financial system" refers to the effect of various components of the system on the financial institutions in general, and banks in particular, that tend to aggravate the economic cycle. During the expansion phase of the economic cycle, a number of factors make it easier for banking institutions to meet the minimum capital adequacy requirements and motivate banks to assume a higher level of risk appetite. In particular, the influence of various micro-level factors on the behaviour of banks has the effect of aggravating the economic cycle. These factors include the following:

- (a) The profits of banking institutions tend to be buoyant, which increases their reserves – that is, their own capital.
- (b) With benign or favourable credit outlooks, credit risk is under-appreciated along with higher risk appetite, both of which drive aggressive growth in lending
- (c) The buoyancy of asset values – both in trading and banking books – and resultant lower risk of impairment (and associated lower provisions) have the effect of increasing the banks' profits and reserves.
- (d) Risk weights (RWs) applied to banking book assets – under both standardised and IRB approaches – tend to be less conservative in a favourable economic climate, owing to the more optimistic outlook reflected in external credit assessment institutions (ECAI) ratings and in IRB estimates of probability of default (PD), respectively.

38. During the expansion phase of an economy, the aforementioned factors allow banks to provide more loans, contributing to an expansion of credit in the economy that then feeds the economic expansion; that is, there is a positive feedback effect. This phenomenon continues until some economic shock, such as the bursting of an asset price bubble, triggers the reverse process – that is, the contraction phase of the economic cycle. In this phase, economic slowdown or contraction leads to stresses among borrowers that affect their ability to service their debts, resulting in deterioration of banks' asset quality. The consequent need for banks to recognise impairments in their asset portfolio and to make adequate loan-loss provisions tends to put significant pressure on the capital they are holding. If banks are highly

leveraged and capital becomes difficult and/or costly to raise, in order to maintain their capital ratios banks have to reduce their RWAs, and the resultant credit squeeze aggravates the downturn, making it deeper and possibly leading to a recession. Simultaneously, economic contraction affects banks' profits negatively and requires even more provisions for asset impairments and trading book losses. Thus, during a downturn, the combined impact of these factors exerts pressure on the capital adequacy position of the banks, including some of those that enjoyed a relatively comfortable capital position before the downturn.

39. The propensity to generate asset bubbles, and the resultant losses of capital, may be aggravated by perverse incentives, as in the originate-to-distribute model coupled with "sub-prime" credit practices. In addition, the subjective nature of some fair value measurements of assets and of loss provisions contributes to procyclicality.

2.4.2 Procyclicality in Islamic Finance

40. Typically, the manner in which IIFS provide financing to their customers is more closely linked to investment in real assets and thus may be less prone to contribute to credit bubbles and non-performing assets; however, in the case of real estate, the cyclical nature of this asset class may contribute to procyclicality. In addition, many IIFS raise significant amounts of funds, not in the form of deposits (i.e. liabilities that are not loss-absorbent) but in the form of unrestricted or restricted PSIA, such as profit-sharing and loss-bearing *muḍārabah* contracts, which are typically loss-absorbent to a greater or lesser extent (see section 4.6.1 for details). Depending upon the level of displaced commercial risk incurred by an IIFS, its PSIA can be considered to lie in the range of fully risk-absorbent to partially risk-absorbent (see section 4.6.1). On the assets side, the financing and investment made by the IIFS is typically related to the sale, purchase, usufruct or provision of services related to various kinds of real assets. (See Section 5 for details of major modes of financing and investment used by IIFS.) Similar constraints on assets also apply to asset securitisations, the issuance of *sukūk* and the structuring of Sharī'ah-compliant hedging instruments, thus making it easier to track down the underlying risks of such structures than in the case of certain conventional securitisations (see Section 6). Thus, overall, the relationships between deposits, leverage, credit extension and capital requirements found in conventional finance are, at any rate, less mechanical in Islamic finance.

41. Notwithstanding the points highlighted in paragraph 40, the influences of three micro-level factors outlined in paragraph 37 under this section would apply to IIFS to a certain extent. In buoyant economic conditions, as is the case with conventional banks, the capital ratios of IIFS are enhanced as a result of, inter alia: increased profits, which lead to higher

reserves; lower requirements for provisions against asset impairments; and lower credit RWs being applied to banking book assets. Furthermore, the tendency of some IIFS to invest in real sector-related asset classes such as equity investments and real estate may expose these institutions to the cyclical impacts on such assets of the economic cycle in economies that are highly dependent on exports of commodities such as hydrocarbons. The cyclical movements of the prices of these commodities have macroeconomic effects which impact the financial sector, including IIFS. In recent years, some IIFS have started raising term deposits (generally short-term) and making term financing based on reverse CMT. These practices have the effect of introducing a greater degree of procyclicality into the IIFS sector, because of the procyclical perceptions of the counterparty risk to which an IIFS as a financier is exposed, as well as its use of CMT-based term deposits which are not loss-absorbent.

42. As far as system-wide risks are concerned, IIFS have limited counterparty risk exposures compared to their conventional counterparts, except in the case of CMT and *wakālah*-based transactions in interbank markets. Moreover, IIFS do not engage in speculative trading transactions. The application of the originate-to-distribute model of credit origination is also not practised by IIFS, except to a limited extent in the case of some *sukūk* issuances and asset securitisations which have significantly reduced implications for procyclicality. On the other hand, IIFS are exposed to various negative consequences of economic cycles in a number of ways, as mentioned in paragraph 41. Therefore, the IFSB considers it reasonable to expect IIFS to maintain a countercyclical buffer that is also in line with other emerging international practices.

2.4.3 Procyclicality in Emerging Markets

43. As most of the IFSB member jurisdictions may be classified as emerging economies, it is relevant to evaluate the incidence of procyclicality and any need for a CCyB in such economies.

44. Financial market depth and development is closely related to the development of the economies concerned. Historically, most financial crises in developed economies have emerged due to factors internal to the financial systems, such as new exotic financial products, lax credit evaluations by financial institutions leading to asset price bubbles, misaligned compensation practices, etc. In developing (or emerging) markets, financial crises

have emerged mainly due to external shocks such as extreme commodity price volatility, currency speculation (including misuse of the "carry trade" by banks) and/or sudden stops.¹⁰

45. It has been argued that the demand for credit is higher in emerging economies and that any additional capital buffers required for banks should not be allowed to dampen the growth prospects in these economies. The impact of countercyclical buffers in developing countries can be quite strong, where there is no perceived excessive growth of credit of dubious quality. Therefore, a careful examination is needed not to cause unwarranted loss of output and of sound credit growth in developing economies. As banks seek to comply with new capital rules, lower availability of credit may impact economic growth as well as negatively impacting the development of the financial sector and the financial inclusion of the population. The availability of credit might also be impacted if the banks considered the CCyB as a new minimum and did not reduce their capital holdings even when they are allowed by the supervisory authority to release the CCyB.

46. Notwithstanding the above, the imposition of new capital buffers in emerging economies that have financial market imperfections – in environments where the deposit protection schemes are either unavailable or inspire little confidence – may play an additional role as a signal to depositors that banks will have more capital backing, with a greater commitment to the screening and monitoring of credit origination, and be less vulnerable to credit losses which could impact depositors and unrestricted PSIA's.¹¹ This phenomenon may help boost market confidence in the financial system and improve financial inclusion.

47. It is advisable, therefore, that supervisory authorities in the emerging economies, while contemplating the imposition of a CCyB in their jurisdictions, consider a set of triggers and variables that are best suited to the objective of macroprudential supervision, while simultaneously ensuring that its imposition does not hamper economic growth and financial sector development. A number of alternative triggers and macroeconomic variables that can be considered by supervisory authorities are discussed in [Appendix C](#) to this Standard.

¹⁰ "Sudden stop" refers to a sudden slowdown in private capital inflows into emerging market economies. "Sudden stops" are typically followed by a sharp decrease in output, private spending and credit to the private sector. For the jurisdiction, reduction in private capital inflows could result in reversal from large current account deficits to smaller deficits or small surpluses.

¹¹ The assumption is that banks will have more capital to lose, and more capital to absorb losses, before depositors face losses.

2.4.4 The Framework

48. Supervisory authorities should set out requirements for the CCyB in their jurisdictions¹² based on the guidance provided in this subsection. As indicated above, the CCyB has the macroprudential objective of reducing the build-up of systemic risk during periods of excessive aggregate credit growth. Whereas the minimum capital requirements and the CCB have the mainly microprudential objectives of ensuring that individual banks remain solvent during stressed market conditions, the CCyB has the macroprudential objective of ensuring that the banking sector has levels of capital sufficient to maintain an uninterrupted supply of credit to the various economic sectors during periods of stress. This is intended to ensure that the real sector is not constrained by reduced credit availability during a downturn and that capital in the banking sector has a cushion enabling it to absorb additional provisioning and credit losses during stressed market conditions. In addition, the CCyB is intended to promote financial stability by inhibiting the build-up of asset price bubbles in times of economic expansion (by imposing increased capital requirements during such times) and consequent financial system imbalances. In other words, during a period of excessive credit supply in the initial phase of an economic cycle, the build-up of a CCyB could increase the cost of credit, thus reducing the demand for it. It thus aims to reconcile microprudential policies with the goal of preserving the soundness of the whole financial system.

49. The main responsibility of the supervisory authority in this regard will be identifying the build-up of system-wide risk due to excessive credit growth in the jurisdiction. Such identification will be made on the basis of monitoring various metrics chosen by the supervisory authority, as elaborated in Appendix C. After the supervisory authority identifies the presence of system-wide risk due to excessive credit growth based on selected metrics, it will apply its judgment to establish: (a) whether a CCyB should be imposed in the jurisdiction; (b) what should be the level of the CCyB as a percentage of RWAs; (c) whether the CCyB should increase or decrease over time, depending upon the direction of system-wide risk; and (d) whether to increase the CCyB requirement, in the event that system-wide risk starts to develop.

¹² For the purpose of supervising and controlling the CCB regime, each jurisdiction should decide which supervising institution – central bank or financial supervision authority, if present in the jurisdiction – should be assigned this responsibility. The operation of the CCB regime shall require analysing both macroeconomic and supervisory information. Moreover, it would have implications for the conduct of monetary and fiscal policies in the jurisdiction. Therefore, it is advisable that, whichever authority is selected, timely and coordinated information sharing and consistent decision making is ensured between various supervisory authorities in the jurisdiction.

50. The extent of application of CCyB can be chosen in the range of 0–2.5% of RWAs. The RSA of a jurisdiction or any other appropriate macroprudential authority will have the discretion to implement any other macroprudential tools it deems fit for its jurisdiction. In addition, if the need arises, the level of the CCyB can be set higher than 2.5% for all domestic banks and foreign banks with locally incorporated subsidiaries.¹³ The CCyB must be met only by eligible CET1 capital. An internationally active IIFS would use a weighted average of the buffers in effect in the jurisdictions to which it has a credit exposure. An IIFS must meet the CCyB requirement by holding the required amount of CET1 capital at all times, in addition to the CET1 capital it holds to meet its minimum capital requirement specified by its CAR and the CCB. For the sake of clarity, the CET1 capital held by an IIFS to meet its CAR or its CCB requirement cannot be used to meet its CCyB requirement.

51. When a supervisory authority decides to impose or increase the CCyB requirement, it will make the announcement up to 12 months before the implementation date so that IIFS have enough time to meet the additional capital requirements. When a supervisory authority decides that it is appropriate to release the buffer partially or wholly, a shorter time frame could be applied so that the credit supply is not restricted by higher capital requirements at a time when economic conditions warrant a higher supply of credit.

52. Supervisory authorities should explain, on a regular basis, the range of metrics and reference tools used to arrive at the decisions relating to the CCyB. The ultimate objective of using these qualitative and quantitative tools and any other variables is to gauge the build-up of system-wide risk due to excessive credit growth in order to guide the decisions related to the CCyB. This Standard explains various possible metrics that can be taken into account by supervisory authorities in formulating CCyB-related decisions, but stops short of providing a detailed explanation of these metrics, except for the credit-to-gross domestic product (GDP) gap measure proposed by the BCBS.

53. Some additional supervisory guidance on the CCyB has been provided in Appendix C. This appendix delineates the calculation mechanism of various components of the credit-to-GDP gap measure, as well as suggesting additional tools and indicators that can support the supervisory authorities in estimating an appropriate level of the CCyB in the jurisdiction. Further, it provides guidance to supervisory authorities at various phases of operating the CCyB regime, and deals with some related operational issues – for example, application of CCyB on domestic versus international IIFS and ceiling of the CCyB.

¹³ The international reciprocity provisions, however, would not apply to CCB levels in excess of 2.5% of RWAs.

2.5 Leverage Ratio

2.5.1 Factors Leading to Leverage

54. Financial leverage – that is, the use of non-equity funds – enables a financial institution to perform its core business activity of intermediation in financial markets, thereby providing the channel for capital flows from savers to large sections of the productive economy as recipients of financing. In addition, financial institutions (as with any firm) can also increase their potential returns on their equity capital with a concomitant increase in the riskiness of the equity capital and its exposure to losses, since the non-equity funds are either not, or are only partially, risk-absorbent. Leverage is commonly accomplished using borrowed funds, debt capital or derivative instruments, etc. For banks, leverage arises from their inherent business model of intermediation in financial markets, where they provide the channel for the flow of savings from savers to recipients of financing .

55. The prevalent capital adequacy regulations based on determination of risk-weighted assets offered methods and approaches for banks to structure products and suppress the risk weights intended to reflect the riskiness of the products. These measures helped the banks to lower their capital requirements and allowed greater capacity to lend as well as achieve higher returns for their shareholders. In many cases, the innovative use of risk-weighting rules and resultant suppression of risk-weighted assets led to a very high level of leverage which contributed to the financial crisis. Among other tools to address the systemic problem of procyclicality¹⁴ and reduce the incentives for banks to offer highly leveraged products, the BCBS introduced the leverage ratio as a risk-insensitive measure for limiting the overall leverage of a bank, which can be imposed on banks as a supplementary measure to risk-based capital requirements. Being a risk-insensitive measure, leverage ratio is intended to act as a backstop measure, providing a hard limit on the extent to which a bank can grow its credit portfolio or asset base, irrespective of the riskiness of its asset portfolio. Thus, the BCBS sees the leverage ratio as a standard to negate any efforts by banks to manipulate the risk-weighting rules or internal models for calculation of risk-weighted assets, thereby expanding their capacity for growth and incidentally increasing the returns on their equity.

2.5.1.1 Leverage in Islamic Finance

56. Generally speaking, Islamic finance is relatively less vulnerable to the frailties caused by highly leveraged products, because Sharī'ah requires in principle that all financing be

¹⁴ The countercyclical buffer discussed in [section 2.3](#) is one of these measures.

linked to transactions in the real economy – that is, production and trade transactions and activities. Similarly, there are restrictions on debt trading and engaging in products involving undue and excessive speculation (*gharar*). At the same time, risk-sharing means of raising funds are encouraged. The combination of these measures seriously limits the leverage effects in Islamic finance, although it does not completely eradicate this phenomenon, as highlighted later in this subsection.

57. As far as IIFS are concerned, only to a limited extent do they use return-paying deposits to leverage their capital. Although they may use unremunerated current accounts for this purpose, with few exceptions such current accounts do not constitute the bulk of an IIFS's funding. Unrestricted PSiAs have historically been a major source of funds for IIFS. Similarly, IIFS do not become involved in transactions involving *gharar* or other leveraged transactions such as CDOs or resecuritisations.

58. Nonetheless, there are a few practices and transactions that may involve IIFS in leveraged transactions, as described in paragraph 59.

59. Some IIFS offer reverse CMT-based¹⁵ deposits to generate a form of fixed-return term deposits. Others use CMT on the assets side of the balance sheet, not just for liquidity management but also for providing uncollateralised financing to their customers. Reverse CMT-based deposits are a form of leverage, which, together with CMT-based term financing, has the potential to create unlimited debt in the system.

60. Based on the factors highlighted above, the IFSB considers it prudent that RSAs apply the leverage ratio requirements to IIFS,¹⁶ as prescribed in section 2.5.1.2. This will not only provide a level playing field for IIFS vis-à-vis conventional financial institutions, but will also be consistent with the global standard on capital adequacy for banks.

2.5.1.2 Computational Details

61. The leverage ratio is a simple, transparent, risk-insensitive measure that will act as a supplement to the risk-based capital requirements set out elsewhere in this Standard. It will help to restrict the build-up of leverage in the Islamic banking sector which may not only expose IIFS to higher financial risk, but may potentially damage the overall financial system, and the economy if and when de-leveraging occurs.

¹⁵ This transaction is also known as *tawwaruq* deposits, CMT deposits, international CMT deposits, etc., in various jurisdictions.

¹⁶ The survey conducted by the IFSB Working Group found that most IIFS have their current leverage ratio well below the 3% leverage ratio proposed here.

62. The leverage ratio described below shall be applicable at the level of 3% and shall be calculated as the average of the monthly leverage ratio over the quarter, based on the definitions of capital measure and exposure measure as defined below. The formula for calculation of the leverage ratio will be:

$$\text{Leverage ratio} = \frac{\text{Capital measure}}{\text{Exposure measure}} \geq 3\%$$

Where:

- ❖ *Capital measure*: Tier 1 capital – comprising CET1 capital and AT1 capital – as defined under sections 3.1.1 and 3.1.2 of this Standard.
- ❖ *Exposure measure*: This comprises both the on-balance and off-balance sheet exposures, less associated specific provisions. In addition, general provisions that have reduced Tier 1 capital should be deducted from the leverage ratio exposure measure.

2.5.1.3 Capital Measure

63. The capital measure of the leverage ratio shall be Tier 1 capital as defined in sections 3.1.1 and 3.1.2. Based on section 3.1.5, items that are treated as complete deductions from Tier 1 capital do not contribute to leverage, and hence should be deducted from the denominator as well – that is, the exposure measure. This is to ensure internal consistency in the construction of the metric by achieving consistent measures of the capital and exposure and to avoid double counting in the calculation of the leverage ratio.

64. For an IIFS's investment in the capital of banking, financial and *takāful* entities, as outlined in paragraph 1251.i), where a financial entity is included in the accounting consolidation, but not in the regulatory consolidation, the investments in the capital of such an entity are required to be deducted to the extent that they exceed certain thresholds.

2.5.1.4 Exposure Measure

65. The calculation of total exposure for the leverage ratio should generally follow the accounting values. All on-balance sheet, non-derivative exposures shall be included net of specific provisions and valuation adjustments (e.g. credit valuation adjustments).

66. Unless specified otherwise, IIFS should not consider the impact of credit risk mitigation (including physical or financial collateral, guarantees, *urbun*, *hamish jiddiyah*, etc.),

and on-balance sheet exposures should not be adjusted for the purpose of calculating the total exposure. Netting of financing exposures against PSIA/deposits shall not be allowed.¹⁷

67. In cases involving investments in the capital of banking, financial, insurance and commercial entities that are outside the regulatory scope of consolidation, only the investment in the capital of such entities (i.e only the carrying value of the investment, as opposed to the underlying assets and other exposures of the investee) needs to be included in the leverage ratio exposure measure.

68. In cases where a banking, financial or insurance entity is not included in the regulatory scope of consolidation as set out in paragraph 64, the amount of any investment in the capital of that entity that is totally or partially deducted from Common Equity Tier 1 capital or from Additional Tier 1 capital of the IIFS following the corresponding deduction approach in paragraph 125(1.i) as an adjustment to the capital of the IIFS should also be deducted from the leverage ratio exposure measure.

69. With regard to securitisations exposures, an originating IIFS may exclude securitised exposures from its leverage ratio exposure measure if the securitisation meets the operational requirements for the recognition of risk transference according to section 6.2.9 (*sukuk* and securitisation) of the securitisation criteria. IIFS meeting these conditions must include any retained securitisation exposures in their leverage ratio exposure measure. In all other cases – for example, securitisations that do not meet the operational requirements for the recognition of risk transference – the securitised exposures must be included in the leverage ratio exposure measure.

70. At national discretion, and to facilitate the implementation of monetary policies, a jurisdiction may temporarily exempt central bank reserves from the leverage ratio exposure measure in exceptional macroeconomic circumstances. To maintain the same level of resilience provided by the leverage ratio, a jurisdiction applying this discretion must also increase the calibration of the minimum leverage ratio requirement commensurately to offset the impact of exempting central bank reserves. In addition, in order to maintain the comparability and transparency of the leverage ratio framework, IIFSs will be required to disclose the impact of any temporary exemption alongside ongoing public disclosure of the leverage ratio without application of such exemption.

¹⁷ In principle, exposures in respect of assets financed by PSIA funds are borne by the IAH. However, for the purpose of calculating leverage, it is prudent to include these in the exposures of the IIFS, subject to the deduction of any related balance of IRR.

71. An IIFS's total leverage ratio exposure measure is the sum of the following exposures: (a) on-balance sheet exposures); (b) Shari'ah-compliant hedging instruments; (c) Shari'ah-compliant alternatives to securities financing transactions (SFTs); and (d) off-balance sheet items. Specific details on the treatment of on- and off-balance sheet items in the calculation of total exposure are provided below.

2.5.1.5 On-Balance Sheet Items

72. All on-balance sheet items on the assets side of the IIFS's balance sheet shall be included in the leverage ratio exposure measure, including all Shari'ah-compliant alternatives to repurchase transactions, securities financing transactions and Shari'ah compliant hedging instruments. The detailed methodology and calculations in respect of Shari'ah-compliant hedging instruments and Shariah-compliant securities financing transactions are contained in Appendix A. An IIFS that has exposure to these classes of assets may refer to Appendix A for guidance.

73. All on-balance sheet assets are included in the leverage ratio exposure measure at their accounting values less deductions for associated specific provisions. In addition, general provisions or reserves held against future, presently unidentified losses on financing that have reduced Tier 1 capital may be deducted from the leverage ratio exposure measure.

74. In calculating the total on-balance sheet exposures, IIFS may be required to consider the following items:

- a. Deduct all other balance sheet asset amounts deducted from Tier 1 capital and other regulatory adjustments associated with on-balance sheet assets.
- b. IIFS should ensure that the assets funded by UPSIAs are fully included in the exposure measure of leverage ratio. Also, assets funded by PER and IRR are to be accorded similar treatment to UPSIAs. However, in jurisdictions where the relevant RSAs are convinced that the risk of the assets funded by UPSIAs can be effectively transferred to the UIAH in the event of losses or stress events (both IIFS-specific and systemic), RSAs may exercise national discretion to permit IIFS operating in their jurisdiction to deduct assets funded by UPSIAs from the calculation of the leverage ratio. A clear-cut instance of such a case would be the treatment for assets funded by typical RPSIAs wherein the losses are always borne by the RPSIA account holders. So, assets funded by RPSIAs should always be excluded from the calculation of exposure measure in the leverage ratio calculation. IIFS shall deduct all assets funded by the RPSIAs from the leverage ratio unless they are a source of

displaced commercial risk to the IIFS, in which case they should be treated in a similar manner to UPSIAs.

2.5.1.6 Shari'ah-Compliant Hedging Exposure

75. Shari'ah-compliant hedging instruments are Sharī'ah-compliant alternatives to derivative contracts. For Sharī'ah-compliant hedging instruments, the accounting measure of the exposure shall be used. In addition, potential future exposures shall be computed according to the Standardised Approach for Counterparty Credit Risk (SA-CCR) issued in March 2014 by the BCBS. For details on the treatment of Shari'ah-compliant hedging exposure, see Appendix A.

2.5.1.7 Shari'ah-Compliant Alternatives to SFTs

76. Shari'ah-compliant alternatives to SFTs are included in the exposure measure according to the treatment described in Appendix A. The treatment recognises that secured financing and funding in the form of SFTs is an important source of leverage and ensures consistent international implementation by providing a common measure for dealing with the main differences in the operative accounting frameworks.

2.5.1.8 Off-Balance Sheet Items

77. This section explains the treatment of off-balance sheet (OBS) items for inclusion in the leverage ratio exposure measure. OBS items typically include commitments (including liquidity facilities), whether or not unconditionally cancellable, direct credit substitutes, acceptances, standby letters of credit and trade letters of credit. If the OBS item is treated as a Shari'ah-compliant hedging exposure as per the IIFS' relevant accounting standard, then the item must be measured as a Shari'ah-compliant hedging exposure for the purpose of the exposure measure. In this case, the IIFS does not need to apply the OBS item treatment to the exposure. IIFS should be required to include in the exposure measure total OBS exposure amounts (excluding OBS exposure amounts associated with Sharī'ah-compliant alternatives to SFTs and Sharī'ah-compliant hedging transactions, which have already been covered in the last two subsections) on a net notional basis, by applying the effect of credit conversion factors (CCFs) that is lower than the standard 100%.

78. Also, in order to ensure consistency of treatment between the capital measure and the exposure measure of the leverage ratio, specific and general provisions associated with OBS exposures deducted from Tier 1 capital should equally be deducted from the off-balance sheet before being included in the leverage ratio exposure measure.

79. The OBS items shall include, but are not limited to, letters of credit, guarantees, unconditionally cancellable commitments and liquidity facilities. In the risk-based capital framework, OBS items are converted under the standardised approach for credit risk into credit exposure equivalents through the use of credit conversion factors (CCF). For the purpose of determining the exposure amount of OBS items for the leverage ratio, the CCFs set out in Appendix A must be applied to the notional amount.

2.5.2 Additional Supervisory Guidance

80. The leverage ratio framework follows the same scope of regulatory consolidation, including consolidation criteria, as is used for the risk-based regulatory capital framework. For instance, if proportional consolidation is applied to regulatory consolidation under the risk-based framework, the same criteria shall be applied for leverage ratio purposes. The leverage ratio shall apply at the level of the individual IIFS as well as on a consolidated basis.

81. A higher ratio may be required for any IIFS if warranted by its risk profile or circumstances. Supervisory authorities may use stress testing as a complementing tool to adjust the leverage ratio requirement at the jurisdiction and/or individual IIFS-level.

82. To reduce procyclicality, supervisory authorities can limit the build-up of leverage in an upturn by setting a ceiling on the leverage ratio. Supervisory authorities can also build a mechanism to relax the limit during downturns, since constant fixed caps on the leverage ratio could amplify procyclicality by encouraging IIFS to de-leverage during a downturn (and vice versa).

83. This Standard is applicable to Islamic investment banks, which are thus subject to the above requirements in respect of the leverage ratio.

2.6 Domestic Systemically Important Banks

1.6.1 2.6.1 Preamble

84. Financial intermediation activity carried out by banking institutions, including the IIFS, involves significant risks, which may potentially have impacts on the economy as a whole. The injections of public funds to rescue some major financial institutions during the recent Global Financial Crisis demonstrated that some financial institutions are so large and complex that if they were to become insolvent, the financial system and the economy as a whole may suffer significant damage. Therefore, a number of measures have been proposed by international standard-setting bodies in recent years to reduce the risk of large and complex global and domestic systemically important banks (SIBs) failing in the future. These proposals are aimed at ensuring that failing banks can be managed, as far as possible, without incurring costs to the state and public exchequer.

85. Looking at the profile of financial systems in the IFSB member countries and other jurisdictions, it is evident that a number of IIFS in some jurisdictions have systemic significance. Accordingly, these IIFS have the potential to be considered as D-SIBs by their supervisory authorities, once such assessment is conducted by the latter. Therefore, the IFSB finds it pertinent to provide a framework for the assessment and additional regulatory requirements for D-SIBs. Taking a non-prescriptive approach, the following framework provides a broad outline to supervisory authorities for selecting the D-SIBs and outlining the requirements for higher loss absorbency (HLA) as well as recovery and crisis management plans. In the dual banking environments, the following guidelines on D-SIBs can be used by supervisory authorities for assessing and stipulating additional policy measures for all the banking institutions in the jurisdiction, including the IIFS. As additional policy measures outlined below will be applicable to any bank selected as a D-SIB based on the supervisory assessment, whether conventional or Islamic, the remaining text will use the term “bank” (to accommodate conventional and Islamic banks) instead of “IIFS”.

1.6.2 2.6.2 The Rationale for Taking Additional Policy Measures

86. The rationale for adopting additional policy measures for D-SIBs is based on the “negative externalities” – that is, undesirable side effects – created by D-SIBs which current regulatory policies do not fully address. These externalities include, inter alia:

- a. In maximising their private benefits, individual financial institutions may rationally choose outcomes that, from a system-wide level, are sub-optimal because they do not take into account these externalities.

- b. The impact of the failure or impairment of a large, interconnected financial institution at the domestic level can send shocks through the financial system which, in turn, can harm the real economy.
- c. The moral hazard costs associated with direct support and implicit government guarantees may amplify risk taking, reduce market discipline, create competitive distortions, and further increase the probability of distress in the future.

87. Based on the aforementioned potential outcomes of the failure of a large and interconnected bank or IIFS in the financial system, some additional policy measures are warranted for the overall tightening of the regulation and supervision of the financial sector at the national level. The additional requirements proposed below aim to minimise the probability that a D-SIB will fail, and to limit the costs to society and the state if this should happen anyway. Thus, additional requirements aim at underpinning financial stability by making the D-SIBs more resilient, even under severe stress.

88. The assessment of D-SIBs will be made in terms of the *impact* that failure of a bank can have on the domestic financial system and wider economy, rather than the risk that a failure can occur.¹⁸ To a certain extent, additional requirements for D-SIBs may increase their costs, as additional capital will need to be raised. Increased costs could influence the possibility that the relevant institutions would provide financing to the vital sectors of the economy, particularly in the period where the institution is adapting to the additional requirements. This may have a negative effect on the entire economy. Nevertheless, various studies on additional capital requirements for SIBs have shown that over the long term, the impact on the economy will be positive.¹⁹ It is emphasised that a stable financial sector is a fundamental prerequisite for long-term growth and employment, and therefore the suggested requirements will contribute significantly to the financial stability of the relevant financial systems in the future.

89. The additional capital requirements will apply to consolidated groups and subsidiaries. However, national authorities may apply them to individual banks or branches of foreign banks in their jurisdictions in accordance with their legal and regulatory frameworks.

¹⁸ This can be thought of as a domestic, system-wide, loss-given-default (LGD) concept, rather than as a probability of default concept.

¹⁹ The BCBS study estimated that the total effect of additional requirements for G-SIBs on the global economy will be positive. The full requirements are estimated to have a negative impact on global GDP of 0.3% during the phasing-in period, while the long-run permanent positive effects of a reduced likelihood of a future systemic banking crisis will result in a higher global GDP of 2.5%. [BCBS: "Assessment of the macroeconomic impact of higher loss absorbency for global systemically important banks", October 2011]. Similarly, the European Commission estimates that the positive effects of the capital regulatory directive 4 (CRD) proposal will result in a higher EU GDP of around 2% in the long run.

90. In line with the timeline stipulated for the G-SIBs, the banks identified as D-SIBs by their national supervisory authorities can be required to comply with additional capital requirements from January 2016.

1.6.3 2.6.3 Assessment Methodology

91. Supervisory authorities should establish a methodology for assessing the degree to which banks are systemically important in a domestic context. Such a methodology should reflect the potential impact of, or the externality imposed by, a bank's failure on the domestic economy. All the banks in the local financial system will be assessed for their degree of systemic importance. With respect to the domestic operations of a foreign-incorporated bank, home authorities should assess banks for their degree of systemic importance at the consolidated group level, while host authorities should assess subsidiaries in their jurisdictions, consolidated to include any of their own downstream subsidiaries, for their degree of systemic importance. The consideration of a bank on a (globally) consolidated basis will help evaluate the spillover effects of the international operations of a failed bank on the domestic economy. Jurisdictions that are home to banking groups that engage in cross-border activity could be impacted by the failure of the whole banking group and not just by the part of the group that undertakes domestic activity in the home economy.²⁰

92. Supervisory authorities should undertake regular assessments of the systemic importance of the banks in their jurisdictions to ensure that their assessment reflects the current state of the relevant financial systems. The interval between assessments should be appropriate so as to reflect changes in the various selected factors – for example, one year. If there are important structural changes to the banking system such as mergers and acquisitions, supervisory authorities should reassess the D-SIBs, along with the change in associated factors and other parameters, if needed.

93. Supervisory authorities should publicly disclose information that provides an outline of the methodology employed to assess the systemic importance of banks in their domestic economy. Public disclosure of the assessment process will provide appropriate incentives for banks to seek to reduce the systemic risk they pose to the reference system.

94. When identifying D-SIBs at group level, the total systemic importance of the group should be taken into account. The institutions in a group are closely interconnected and thus carry a risk of intragroup contagion in the event of financial problems in parts of the group.

²⁰ This is particularly important given the possibility that the home government may have to fund/resolve the foreign operations in the absence of relevant cross-border agreements.

Consequently, the D-SIB capital requirement should be set at the group level with the same percentage requirement at the consolidated level and for each institution in the group, operating in the same jurisdictions. It cannot be ruled out that, to a large extent, a bank will provide financing to its subsidiaries if they experience financial difficulties. Experience from the financial crisis confirms that an IIFS that allows its subsidiaries to fail will suffer reputational damage. Individually, a bank may be less systemically important, while it may acquire significance due to its group affiliation.

95. It may be relevant to include a qualitative element in the identification of D-SIBs in order to identify even more institutions than otherwise selected using only a quantitative approach. This may be as a consequence of a large market share within special segments or geographical areas, or because the institution is particularly linked to the rest of the sector.

96. Supervisory authorities should decide the broad category of factors that will be used for assessing the impact of a D-SIB's failure. Among other things, supervisory authorities can use the factors mentioned in Appendix F. Supervisory authorities will have discretion as to the appropriate relative weights they place on these factors, depending on national circumstances. At their discretion, supervisory authorities can choose all, a few or a single factor for designating a bank in the list of D-SIBs. The use of these factors in calibrating the higher loss absorbency (HLA) requirement would provide justification for different intensities of policy responses across countries for banks that are otherwise similar across the four key bank-specific factors.

1.6.4 2.6.4 Requirement for Higher Loss Absorbency

97. Supervisory authorities should document the quantitative and qualitative methodologies used to calibrate the requirement for HLA that will be required for D-SIBs. The methodologies can also include jurisdiction-specific indicators. The HLA requirement would help reduce the probability of failure of D-SIBs in comparison to non-systemic institutions. The documentation and disclosure of assessment methodologies will help cross-country comparisons and provide greater transparency to various stakeholders.

98. Supervisory authorities shall have policy discretion to decide the level of HLA for selected D-SIBs based on the degree of domestic systemic importance. There should be a transparent analytical framework for deciding the HLA requirement for various categories or buckets of D-SIBs. Otherwise, supervisory authorities may opt to apply the same level of HLA for all the selected D-SIBs, if the implications of their failure for the domestic financial system and economy are not significantly different. In either case, it should be ensured that the

assessment methodology provides appropriate incentives to selected D-SIBs banks which are subject to the HLA requirements to reduce (or at least not increase) their systemic importance over time. In the case where there are multiple D-SIB buckets in a jurisdiction, this could imply differentiated levels of HLA between D-SIB buckets. Similarly, banks with the same degree of systemic importance in their jurisdiction, regardless of whether they are domestic banks, subsidiaries of foreign banking groups or subsidiaries of G-SIBs, are subject to the same HLA requirements, other things being equal.

99. An action by the host authorities to impose a D-SIB HLA requirement leads to increases in capital at the subsidiary level which can be viewed as a shift in capital from the parent bank to the subsidiary, unless it already holds an adequate capital buffer in the host jurisdiction or the additional capital raised by the subsidiary is from outside investors. This could, in the case of substantial or large subsidiaries, materially decrease the level of capital protecting the parent bank. In such cases, it is important that the home authority continues to ensure there are sufficient financial resources at the parent level – for example, through a solo capital requirement. Similarly, in cases where the subsidiary of a bank is considered to be a D-SIB by a host authority, home and host authorities should make arrangements to coordinate and cooperate on the appropriate HLA requirement, within the constraints imposed by relevant laws in the host jurisdiction. The host authority should provide a rationale for their decision, and an indication of the steps the bank would need to take to avoid/reduce such a requirement.

100. The HLA requirement should be met fully by CET1, which is the simplest and most effective way to increase the going-concern loss-absorbing capacity of a bank. Supervisory authorities have the discretion to stipulate any additional requirements and other policy measures they consider to be appropriate to address the risks posed by a D-SIB. The HLA requirement for D-SIBs is over and above the capital buffers (CCB and CCyB) and minimum capital requirement, with a predetermined set of consequences for banks that do not meet this requirement. Indicatively, supervisory authorities can select an HLA requirement of between 0.5% and 3.5% of CET1 to total risk-weighted assets, depending upon the chosen assessment methodology and relevant buckets, if any.

1.6.5 2.6.5 Other Measures

101. In addition to the HLA requirement for D-SIBs, supervisory authorities may consider the following measures, which can help to strengthen their supervisory oversight over these institutions:

- a. The management of a D-SIB showing noticeable problems is initially expected to take initiatives itself to bring the institution back on the right track. This may be in the form of internal restructuring, raising additional capital in the market, selling parts of the business, etc. If, despite such actions, the institution breaches the capital requirements, supervisory authorities should launch various initiatives to contribute to the recovery of the institution.
- b. All D-SIBs should be required to prepare a recovery plan with more detailed guidelines on how the institution may restore the financial situation in the event of a material deterioration of its financial situation. Supervisory authorities should make an assessment of the recovery plan and, if necessary, may require the institution to prepare a revised plan. If the revised recovery plan fails to address the problems identified, the supervisory authority may order the institution to launch various measures such as reduction of risks, change in business strategy, etc.
- c. In case of problems with a D-SIB, supervision of the institution should be further intensified. The supervisory authority should engage in a closer dialogue with the D-SIB at the management level in general, as well as at a more technical level in the most significant risk areas, in order to ensure an ongoing exchange of information and to support regular monitoring.

102. Supervisory authorities may deem it appropriate to set tightened requirements for D-SIBs in respect of corporate governance. Requirements for corporate governance should contribute to ensuring that an institution's internal procedures and guidelines contribute, to the extent possible, to its effective operation and thus reduce the risk that it will fail.

2.7 Islamic Window Operations

2.7.1 Background

103. This subsection outlines capital adequacy issues related to the treatment of Islamic window operations of conventional banks as defined in paragraph 8. Islamic windows are present in a majority of jurisdictions where Islamic finance is operating. In most jurisdictions, Islamic windows are potentially self-contained and segregated in terms of Sharī'ah-compliant financial intermediation; that is, the operations of such windows are Sharī'ah-compliant on both sides of the balance sheet. As mentioned in paragraph 8, for the purpose of this Standard, the guidance on Islamic windows will be mainly addressed to the self-contained window operations of conventional banks. Nevertheless, the following guidance has briefly covered the capital adequacy aspect of "assets-side only" operations of conventional banks for the guidance of supervisory authorities in section 2.7.4.

104. Supervisory practices related to applying capital adequacy requirements for Islamic windows vary considerably across jurisdictions. In some jurisdictions, supervisory authorities require Islamic windows to maintain a separate amount of capital and to follow the applicable minimum capital adequacy ratio requirements, while simultaneously requiring regulatory capital and CAR requirements to be met at the consolidated (i.e. parent) level.

105. In other jurisdictions, there is no specific requirement for Islamic windows to maintain a separate amount of capital or to meet separate regulatory capital requirements. Instead, these requirements are only imposed at the overall bank level, which means that Islamic window operations are consolidated at the parent entity level. Similarly, there are capital adequacy issues related to the treatment of Islamic windows when the parent is based in another jurisdiction. In the following paragraphs, guidance is provided for capital adequacy calculations for each of these structures for Islamic windows.

2.7.2 Islamic Windows with Parent in the Same Jurisdiction

106. If the parent is based in the same jurisdiction, the supervisory authority may require the parent to maintain separate capital and calculate a separate CAR for the Islamic window, while simultaneously following the regulatory requirements at the overall bank level. In other cases, these regulatory capital requirements are applied only at the consolidated level, as mentioned in paragraph 105.

2.7.2.1 Islamic windows with separate capital requirements

107. In this case, supervisory authorities commonly require the conventional bank to allocate a specific amount of capital for the Islamic window operation at the onset. Such a requirement is normally accompanied by a requirement to establish a separate and self-accounting Islamic banking branch, division or department, with designated management. Moreover, Islamic windows are required to follow CAR requirements applicable in the jurisdiction. Thus, the Islamic windows' own capital is clearly identified and segregated from the regulatory capital available for the conventional operation. Effectively, this means that if Islamic assets grow with the passage of time, Islamic windows will be required to increase their capital accordingly in order to meet the CAR. In this case, an Islamic window will in the first place be considered separately as a branch or division of the entity of which it is a part, and in the second place be considered on a consolidated basis at the overall bank level.

108. Supervisory authorities can use different approaches for calculating capital requirements at the parent level. In the first approach, the assets of the Islamic window operations are included in those of the parent for the latter's capital adequacy calculation, while simultaneously requiring the window operations to fulfil the minimum capital adequacy requirements according to paragraph 107. In the second approach, where consolidation is not made at the parent level, the capital requirement shall be calculated by first computing the denominator of the CAR – that is, computing the RWAs of the window, based on the risk exposures of the assets (as per Section 5) – and making deductions from the denominator depending on whether the IFSB's standard formula or supervisory discretion formula is used (as per section 4.4.5). The amount of required capital for the window operations shall then be calculated as being the amount in the numerator of the CAR that will meet the regulatory capital requirement. The capital of a window so calculated shall be deducted from the common equity of the parent in the numerator of its CAR. The use of this approach for Islamic windows is subject to considerations of materiality and supervisory discretion.

2.7.2.2 Islamic windows with no separate capital requirements

109. When the supervisory authority does not require Islamic windows to maintain separate capital or to meet separate CAR requirements, the parent will simply calculate its regulatory capital and CAR at the overall bank level, which includes its Islamic window operations. Commonly in this case, the denominator of the CAR is not adjusted to cater for any DCR attached to the unrestricted PSIA (as per section 4.4.5). This means that the risk absorbency features of UPSIA (either on a full or a partial basis) are not considered when calculating the CAR for the parent bank; in effect, they are treated as liabilities. Supervisory authorities shall, inter alia, provide guidance on the following matters:

(a) the applicable RWs for assets of Islamic windows in line with Sections 4-7 of this Standard; and

(b) the need for any adjustment in the calculation of CAR in line with section 4.4.5. The risk absorbency of the window's UPSIA should be taken into account with the use of the applicable alpha factor.

110. Supervisory authorities may consider applying separate minimum capital requirements in line with section 2.7.2.1 for Islamic windows that: (a) become of significant size in relation to the operations of the parent; or (b) gain a sizeable market share of the jurisdiction's Islamic banking assets. In some jurisdictions, supervisory authorities have been recommending or requiring that the Islamic windows in their jurisdictions should convert to Islamic banking subsidiaries when they attain a significant size after several years of operations. Supervisory authorities may stipulate criteria (in terms of asset size of Islamic windows in absolute terms or as a percentage of the parent's balance sheet) for such conversion, based on the overall legal and regulatory framework in the jurisdiction as well as its overall strategic plan for the Islamic banking industry.

2.7.3 Islamic Windows with Parent in Another Jurisdiction

111. Depending upon the applicable regulatory framework, in most cases, Islamic window operations of a conventional bank in a jurisdiction other than its home jurisdiction shall be effectively considered foreign branch operations of the latter. Most supervisory authorities in IFSB member countries require such Islamic windows to maintain separate regulatory capital and to meet the minimum CAR requirements. In a few jurisdictions, nevertheless, instead of stipulating minimum regulatory capital and CAR requirements for a foreign branch, the host supervisory authority requires a guarantee from the parent entity to make sure that the branch operations receive appropriate capital support from the parent. This raises the issue of the extent to which such a guarantee may be relied upon in stressed conditions. Ideally, such situations need to be dealt with by effective and robust implementation of consolidated supervision by the home supervisor and effective regulatory cooperation and information exchange between the home and the host supervisors. This should be documented in the form of a robust and well-defined memorandum of understanding (MOU) which is consistent with the Basel standard for cross-border regulatory cooperation and must be implemented with periodic exchange of regulatory information as well as supervisory colleges.

112. Apart from the supervisor's requirements relating to minimum capital adequacy requirements as mentioned in paragraph 111, supervisory authorities should provide

guidance on the points highlighted in paragraph 109. Host supervisory authorities should also pay particular attention to ensuring that Islamic windows in the local market with a foreign parent have adequate capital support.

2.7.4 Assets-Side Islamic Operations of Conventional Banks

113. Some conventional banks offer Shari'ah-compliant financing products without holding themselves out as IIFS, in order to meet the needs of their customers. In such cases, often the customers ensure the Shari'ah compliance of the financing they receive. The relevant conventional banks can use the guidance provided in Sections 4-7 of this Standard to calculate appropriate RWs for their Shari'ah-compliant financing assets. The RSAs of such conventional banks can also use the guidance provided in Sections 4-7 of this Standard to establish guidance for determining appropriate RWAs for such exposures.

SECTION 3: REGULATORY CAPITAL

3.1 Components of Capital

114. This section provides a definition of eligible regulatory capital for IIFS. The total capital is a critical determinant of the capital adequacy of an IIFS and is used as the numerator in the CAR formula for determining capital adequacy. The section will further explain the criteria and characteristics of each component of total capital.

115. Total capital for IIFS is the sum of Tier 1 and Tier 2 capital. Tier 1 capital consists of Common Equity Tier 1 (CET1 capital) and Additional Tier 1 (AT1 capital). CET1 capital consists of common equity share capital, retained earnings and other reserves, which are detailed in paragraph 118. AT1 capital consists of Sharī'ah-compliant instruments that are convertible into loss-absorbing capital at the point of non-viability (PONV) of the issuing IIFS and reserves, as detailed in paragraph 12019. Tier 1 capital, that includes CET1 and AT1 capital, is considered as "going concern" capital, which is expected to absorb unexpected losses arising in the normal course of business and thus to keep the IIFS solvent and as a going concern.

116. Tier 2 (T2) capital consists of Sharī'ah-compliant instruments and reserves the detailed characteristics and terms of which are detailed in paragraphs 12221 and 12322. T2 capital is considered to be "gone concern" capital with the purpose of absorbing further losses (beyond the PONV) in the case of non-viability of the IIFS, and thus helps to protect the current account holders and other investors of the IIFS. This component is also crucial in maintaining financial stability by preventing a contagion effect from a failing IIFS, as it prevents loss of capital by investors and current account holders of IIFS. Various eligible adjustments/deductions shall apply to the respective type of capital, as explained in section 3.1.5. In order for an instrument to be included in any of these components of total capital referred to above, a set of relevant criteria (provided in sections 3.1.1–3.1.3) should be met.

3.1.1 Common Equity Tier 1 Capital

117. Common Equity Tier 1 capital forms the highest quality of capital for IIFS. This section lays out stringent eligibility criteria for an instrument to qualify as a component of the CET1 capital. The criteria are aimed at ensuring that capital is of a high quality in terms of its permanence and loss-absorption capacity.

118. CET1 capital comprises the sum of the following elements:

- a. *Common equity shares issued by the IIFS*: These shares should be fully paid up, and should meet the criteria of being classified as common shares forming part of the shareholders' equity of the IIFS.
- b. *Stock surplus*: Stock surplus (share premium) from the issue of common shares is eligible to form part of CET 1 capital.
- c. *Retained earnings*: The amount of net earnings carried forward from previous financial periods shall be recognised and included in the calculation of CET1 capital. Interim profit or loss may be permitted as part of the retained earnings for inclusion in CET 1 capital, as a point of national discretion by the RSAs. In such cases, the RSAs may mandate verification by external auditors or similar reviews by independent third parties as preconditions for inclusion of interim profits in CET1 capital.
- d. *Other disclosed reserves and accumulated other comprehensive income, as defined in IFRS*: Dividends declared and payable are not included in CET1, as such amounts are classified as liabilities in accordance with the International Financial Reporting Standards (IFRS) and would normally be so classified by accounting standards applicable in the jurisdiction.
- e. *Common equity shares issued by consolidated subsidiaries of IIFS*: Such common equity shares that are issued by IIFS's consolidated subsidiaries and held by third parties (minority interest) and meet the criteria for being included in CET1 capital are provided below.
- f. Regulatory adjustments/deductions applicable to CET1 capital.

119. Specific eligibility criteria for common equity shares issued by IIFS to be included as CET1 capital are set out below.

a. *Loss absorbency*

Common equity shares must represent the most subordinated claim in case of liquidation of the IIFS, having a claim only on the residual assets after all senior claims have been repaid. In terms of sharing any losses as incurred, common equity serves as a first loss position and is able to absorb losses on a going concern basis.²¹ The common equity shares must absorb the first and proportionately greatest share of losses as they occur, and each of the eligible share classes or issues or instruments must absorb losses to the same degree as all other CET1 capital shares. The common equity shares must rank below all other claims in the event of insolvency or liquidation of the issuing IIFS. These conditions on loss absorbency must be complied

²¹ Going concern capital allows an IIFS to continue its activities and helps to prevent insolvency. Going concern capital is considered to be CET1. The purest form of going concern capital is common equity.

with notwithstanding a permanent write-down of the principal of AT1 capital issued by the IIFS concerned.

b. *Issuance process and procedure*

Common equity shares are directly issued by the IIFS with the prior formal approval of the existing common equity shareholders of the issuing IIFS or according to the applicable law in the jurisdiction. The common equity shares must be fully paid-up²² and their purchase should not be funded directly or indirectly by the IIFS or any of its related parties.

c. *Permanence*

The principal amount of common equity shares should be perpetual in nature and may never be reduced or repaid except in the case of liquidation of the issuing IIFS. However, in some cases the applicable laws and the IIFS's statutes may permit common shares to be repurchased, subject to the prior explicit approval of the relevant RSA²³. The offer document or the contractual terms governing the instruments must not include or create an explicit or implicit expectation that the principal amount of the instruments would or might be redeemed, cancelled or bought back (call option) under any circumstances other than in the liquidation of the IIFS, prior to or at issuance of the common equity shares.

d. *Distribution of profit or dividends*

The contractual terms of the common equity shares must not include any obligation for the IIFS to make any distribution of profits (or payment of dividends) to the holders, and under no circumstances should the issuing IIFS be subject to such obligations. Non-payment of dividends or distributions must not constitute an event of default for the IIFS. The common equity shares should not be eligible for any preferential distributions, nor should their contractual terms provide rights for any preferential distributions. Distributions on these common equity shares shall be made out of distributable items, which normally consist of profits for the year that are attributable to common equity and, subject to the approval of the RSA concerned, retained earnings. (The level of distribution of profit must be independent of, and not linked or

²² Reference to paid-in capital in various components of capital refers to capital that has been received with conclusiveness by the IIFS, is reliably valued, is fully under the IIFS's control, and does not directly or indirectly expose it to the credit risk of the investor. The payment, however, need not necessarily be made in cash; for example, shares issued in payment for the acquisition of another company are not paid for in cash. Commonly, an IIFS may be required to obtain prior supervisory approval to include in capital an instrument which has not been paid for in cash.

²³ Depending on the applicable law, exceptions may include discretionary repurchases or other means of reduction of capital. Repurchased common shares may be held as Treasury stock or, subject to the law and supervisory approval, may be cancelled.

... tied to, the amount paid in at issuance.) Distributions can only be made after meeting all legal and contractual obligations and payments to more senior capital instruments. The level of distributions must not be determined on the basis of the amount for which the shares were purchased at the time of their issuance.

e. *Equity in nature*

The common equity shares must qualify as equity capital of the issuing IIFS within the meaning of the applicable legal framework (company law) and must be eligible to be classified as equity within the meaning of the International Financial Reporting Standards. The common equity shares must also be eligible for classification as equity capital for the purposes of determining balance sheet insolvency, under applicable insolvency laws. The paid-up amount of the common equity shares must be clearly and separately disclosed as such in the balance sheet of the IIFS.²⁴

f. *Unsecured in nature*

The amount paid towards subscription to the common equity capital at issuance must be neither secured nor guaranteed by the IIFS or by any of its related entities (parent/subsidiary or sister of the company or Islamic window or other affiliate group), nor by any member of its financial group. There should be no contractual terms or arrangements in the issue of eligible instruments that enhance the seniority of claims under the instruments in insolvency or liquidation.

g. *Disclosure requirement*

Common equity is clearly stated and disclosed on the IIFS's balance sheet.²⁵ In instances where the common equity shares cease to fulfil the eligibility criteria set out in this paragraph, the principal amount and the share premium, if any, that relates to those common equity shares will cease to qualify as CET1 capital.

3.1.2 *Additional Tier 1 Capital*

120. Additional Tier 1 capital must consist only of instruments that are capable of a high degree of loss absorbency and can be converted into CET1 capital instruments to absorb losses. AT1 capital comprises the sum of the following elements:

- a. instruments issued by IIFS that meet the eligibility criteria for inclusion in AT1 capital as set out in paragraph 1210;

²⁴ Where associates and joint ventures are accounted for under the equity method, earnings of such entities are eligible for inclusion in the CET1 of the IIFS to the extent that they are reflected in retained earnings and other reserves of the IIFS and are not excluded by any of the regulatory adjustments set out in section 2.1.5.

²⁵ The reference to the balance sheet is made in the context of the published financial statements of the IIFS, as required by respective legal and/or supervisory stipulations.

- b. any premium received on the issue of eligible instruments included in AT1 capital, and which is not included in CET1 capital;
- c. instruments or qualifying capital issued by consolidated subsidiaries of the IIFS to third-party investors that meet the eligibility criteria for inclusion in AT1 capital and are not included in CET1 capital (see paragraph 125(a) – minority interest); and
- d. regulatory adjustments/deductions applicable to AT1 capital.

121. Specific eligibility criteria for classification of instruments as AT1 capital are set out below.

a. *Loss absorbency*

Subject to Shari`ah approval, an IIFS may issue AT1 *sukūk* with the whole or a part of the business assets of the IIFS as the underlying assets of the *sukūk*, with contractual terms of the issue allowing it to absorb losses so as to qualify for inclusion in AT1 capital. The *sukūk* holders fully share the risks and rewards of the IIFS's operations.

b. *Issuance process and procedure*

The instrument is issued and paid-up, and neither the IIFS nor a related party over which the IIFS exercises control or significant influence can purchase the instrument, or fund its purchase, either directly or indirectly. Repayment of principal through repurchase or buy-back is allowed subject to supervisory approval without any expectation of repayment being created by the IIFS. The information to be disclosed must include, but is not limited to, applicable Shariah principles, salient features of the instruments offered, and the use of a special-purpose entity (SPE) that must follow specific requirements.

c. *Maturity and callability*

The instrument must be perpetual in nature and must not have any defined maturity date. It must not have step-up features (i.e. periodic increases in the rate of return) and must be devoid of any other incentive to the issuing IIFS to redeem it.²⁶ If the instrument is callable, the issuing IIFS may be allowed to exercise a call option only after five years and subject to certain requirements, such as: (i) prior supervisory approval; (ii) no call expectation is created by the IIFS; and (iii) ability to replace the called instruments with the same or better quality of capital, either before or concurrently with the call. The IIFS shall not exercise a call unless it successfully

²⁶ An example of an "incentive to the issuer to redeem" is a call option held by the issuer combined with an investor right or option to convert the instrument into common shares if the call is not exercised. Such an incentive would conflict with the requirement of permanence.

exhibits that its capital position is above the regulatory capital requirement after the call option is exercised. Instruments that qualify for AT1 capital cannot have any features that hinder recapitalisation (provisions that require the IIFS to compensate investors if a new instrument is issued at a lower price during a specified time frame). If an instrument is issued out of an SPE, proceeds must be immediately available without limitation to the IIFS in a form which meets or exceeds all of the other criteria for inclusion in AT1 capital.

d. *Distribution of profits*

The contract should provide that non-distribution of profits would not constitute a default event. Distributions should not be linked to the credit rating of the IIFS, either wholly or in part.

e. *Unsecured in nature*

The amount paid at issuance is neither secured nor guaranteed by the IIFS or any related entity. In addition, there should not be any arrangement that legally or economically increases the seniority of the instrument's claim.

3.1.3 Tier 2 (T2) Capital

122. T2 capital comprises the sum of elements (a)–(d), minus (e), below:

Add:

- a. instruments issued by IIFS that meet the eligibility criteria for inclusion in T2 as set out in paragraph 123;
- b. general provisions or reserves held against future, presently unidentified losses on financing;²⁷
- c. any premium paid on issue of T2 capital instruments;
- d. instruments or qualifying capital issued by consolidated subsidiaries of an IIFS to third-party investors that meet the criteria of T2 capital (see paragraph 125(a) – minority interest);

Minus:

- a. regulatory adjustments/deductions applicable to T2 capital.

²⁷ General provisions/general financing loss reserves eligible for inclusion in “additional capital” are subject to a limit of 1.25% of total RWAs for credit risk. Moreover, provisions related to identified deterioration of specific financing assets or known liabilities, whether individual or grouped, shall not be included in “additional capital”. General provisions are a type of reserve, not liabilities, as defined in the International Accounting Standards (IAS 37).

123. Specific criteria for classification of instruments as “additional capital” are set out below.

a. *Loss absorbency*

The claim on the principal of a T2 capital instrument according to its contractual terms or offering provisions must be wholly subordinated to claims of all non-subordinated creditors of the IIFS issuing the instrument. Subject to Sharī`ah compliance, an IIFS can issue T2 *sukūk* with the underlying assets to be converted (as specified in the contract) into shares of common equity at the PONV. It is essential that the terms of conversion, notably the trigger point and the conversion ratio, are clearly specified in the *sukūk* contract so as to avoid *gharar*. Prior to conversion, the underlying assets of such *sukūk* would not be available to meet the claims of the IIFS’s current account holders or other creditors. After conversion of the *sukūk* in the case of the IIFS’s non-viability or insolvency, T2 capital would rank pari passu with CET1, along with AT1 capital.

b. *Issuance process and procedure*

The instrument must be issued and fully paid-up. The instruments must not be purchased, directly or indirectly, by the IIFS or by a related party over which the IIFS exercises control or significant influence. The purchase or subscription of the instrument must not be funded directly or indirectly by the issuing IIFS. Issuance that takes place outside an operating entity of the IIFS or the holding company in the consolidated group, such as through an SPE, must follow specific requirements. For instance, the proceeds of issuance must be made immediately available to an operating entity or holding company in the consolidated group, in a form that meets or exceeds all the other criteria of Tier 2. The information to be disclosed must include, but not by limited to, applicable Shariah principles, salient features of the instruments offered, and the use of SPE.

c. *Maturity and callable option*

The original maturity of the instrument shall be at least five years. The instrument shall not have step-up facilities or any incentives to redeem by the issuing IIFS. For recognition in regulatory capital, any amortisation of the principal will be on a straight-line basis in the remaining five years before maturity. If the instrument is callable, the call options must be exercisable at the sole discretion of the issuer and the issuer may be permitted to exercise a call option only after five years and subject to certain requirements, such as: (i) prior supervisory approval; (ii) there is no call expectation created by the IIFS; and (iii) ability to replace the called instruments with the same or

better quality of capital, either before or concurrently with the call. The IIFS shall not exercise a call unless it successfully exhibits that its capital position is above the regulatory capital requirement. The contractual terms of the instrument must not indicate or create an expectation that the instrument might be redeemed or repurchased earlier than its stated maturity. A T2 capital instrument in its final five years of maturity may be allowed to include only the amortised amount of the instrument in the regulatory capital of the issuing IIFS. The eligible amount for inclusion in T2 capital must be calculated by dividing the outstanding amount of the T2 capital instrument by the number of years to its final maturity.

d. *Distribution of profits*

The level or volume of distribution of profits to the holders of the instruments should not be modified based on the credit rating of the IIFS, either wholly or in part. The terms of the instrument must not give its holder (i.e. investors) any right to accelerate any scheduled payments in the future, except in the case of liquidation or bankruptcy of the IIFS.

e. *Unsecured in nature*

The amount paid during issuance is neither secured nor guaranteed by the IIFS or any of its related entities. Besides, there should not be any arrangement that legally or economically increases the seniority of claim in the event of liquidation. In instances where a T2 capital instrument ceases to fulfil the eligibility criteria set out in this paragraph, the principal amount and the attendant share premium related to that T2 capital instrument, if any, will cease to qualify as T2 capital.

3.1.4 *Treatment of PSIA, PER and IRR*

124. Profit-sharing investment accounts of an IIFS are not classified as part of the IIFS's capital because they do not meet the above-mentioned criteria of core or additional capital. Furthermore, all the investment risk reserve (IRR) and a portion of the profit equalisation reserve (PER) belong to the equity of investment account holders, and thus are not part of the capital of the IIFS. As the purpose of a PER is to smooth the profit payouts and not to cover losses, any portion of a PER that is part of the IIFS's reserves should also not be treated as part of the regulatory capital of the IIFS. It may be noted that the impact of PER and IRR has already been incorporated in the denominator of the supervisory discretion formula for calculation of the CAR, as discussed in Section 4 of this Standard.

3.1.5 Regulatory Adjustments and Deductions

125. The adjustments to regulatory capital are intended to make its quantification more conservative so that it is available at all times to absorb losses.²⁸ Elements which shall be recognised or adjusted in the calculation of total capital from a regulatory perspective are as follows, subject to the stated conditions:

- a. **Minority interest.**²⁹ Minority interest arising from the issue of capital instruments by a fully consolidated subsidiary of the IIFS may be treated as CET1 or AT1 capital subject to meeting the following conditions and criteria:
 - i. Common Equity Tier 1 (CET1): The conditions are: (i) the subsidiary issuing the instrument should be an IIFS³⁰ itself; and (ii) the relevant instrument should meet all the criteria for being considered as common shares for regulatory purposes. The amount recognised in consolidated CET1 is equal to the total minority interest (meeting the above conditions) minus the *surplus CET1 of the subsidiary attributable to minority investors*. The surplus CET1 of the subsidiary (i.e. the amount in excess of 7.0% of RWA – which is the sum of the minimum CET1 requirement of the subsidiary plus the capital conservation buffer) should be multiplied by the percentage of CET1 that is held by minority shareholders in order to arrive at the amount of the *surplus CET1 of the subsidiary attributable to the minority shareholders*.
 - ii. Tier 1 Capital (CET1 and AT1 Capital): The condition is that the relevant instruments issued by a fully consolidated subsidiary of the IIFS (which must itself be an IIFS) to third-party investors should meet all the criteria for being considered as Tier 1 (CET1 or AT1) capital. The amount recognised in Tier 1 capital is equal to the amount of the Tier 1 capital instruments issued to third parties minus the surplus Tier 1 capital of the subsidiary attributable to the third-party investors. The surplus Tier 1 capital of the subsidiary (i.e. the amount of 8.5% of RWA – which is the sum of the minimum Tier 1 capital requirement of the subsidiary plus the capital conservation buffer) should be multiplied by the percentage of the subsidiary's Tier 1 capital that is held by third-party investors.

²⁸ In order to achieve this objective, the assets that may not have a stable value in stressed market conditions (e.g. goodwill) are deducted, and gains that have not been realised are not recognised in the calculation of regulatory capital.

²⁹ Minority interest is capital in a subsidiary that is owned by other shareholders from outside the IIFS/group. It includes such third parties' interests in the common shares, retained earnings and reserves of the consolidated subsidiaries.

³⁰ Any institution that is subject to the same regulatory and supervision standards as a banking institution in the jurisdiction may be considered an IIFS.

The amount of the Tier 1 capital that will be recognised in “additional capital” will exclude amounts already considered part of CET1.

- iii. *Total Capital (CET1, AT1 and T2 Capital)*: The condition is that the relevant instruments issued by a fully consolidated subsidiary of the IIFS (which must itself be an IIFS) to third-party investors should meet all the criteria for being considered as CET1, AT1 or T2 capital. The amount recognised in consolidated total capital is equal to the amount of the total capital instruments issued to third parties (meeting the above condition) minus the *surplus total capital of the subsidiary attributable to the third-party investors*. The surplus total capital of the subsidiary (i.e. the amount in excess of 10.5% of RWA – which is the sum of the minimum total capital requirement of the subsidiary plus the capital conservation buffer) should be multiplied by the percentage of the subsidiary’s total capital that is held by third-party investors in order to arrive at the amount of the *surplus total capital of the subsidiary attributable to the third-party investors*.
- b. **Unrealised gains and losses**: An IIFS shall derecognise from CET1 capital any component of equity resulting from changes in the fair value of liabilities due to its own credit risk variations.
- c. *Investment in own shares (Treasury shares) and capital*: An IIFS’s investment in its own shares shall be deducted in the calculation of CET1 capital since such an investment has an effect similar to calling the shares – that is, to reduce the capital. Furthermore, in case of any contractual obligation of the IIFS to purchase its own shares, such shares will be deducted from CET1 capital. IIFS should likewise deduct investments in their own AT1 capital instruments in the calculation of its AT1 capital.
- d. **Goodwill and other intangible assets**: Goodwill and other intangible assets should be deducted from CET1. Also deducted is goodwill that is part of the valuation of significant investments in the capital of banking, financial and *takāful* entities that are outside the scope of regulatory consolidation. IIFS may use international financial reporting standards applicable in their jurisdictions to identify elements that fall under the definition of intangible assets.
- e. **Pension fund assets and liabilities**: An IIFS may have its own pension fund, while some IIFS may establish a pension fund in order to meet a regulatory requirement in a jurisdiction in which they operate. Where such pension funds are on the balance sheet or consolidated balance sheet of the IIFS, the net assets of the fund should be deducted from CET1 capital.

- f. **Deferred tax assets (DTAs):** Supervisory authorities may allow recognition of DTAs in their jurisdictions. Such DTAs may be used to reduce any subsequent period's income tax expense of the IIFS as recognised in its income statement.³¹ DTAs that have been recognised, but which rely on the future profitability of the IIFS and are yet to be realised, shall be deducted from the calculation of CET1.³² DTAs and associated "deferred tax liabilities" can be netted off only if the same taxation authority has levied the taxes and has permitted the set-off.
- g. **Cash-flow hedge reserve:** If an IIFS has a cash-flow hedge reserve, the amount of this reserve that relates to the hedging (by means of Sharī'ah-compliant hedging instruments that are reported at fair value in the IIFS's balance sheet) of items which are themselves not reported at fair values in the IIFS's balance sheet, including projected cash flows, should be derecognised in the calculation of CET1. This means that positive amounts should be deducted and negative amounts added back. The element of the cash-flow hedge reserve that gives rise to artificial volatility in common equity is thereby removed, since such an element reflects only the fair value of the hedging item but not that of the hedged item.
- h. **Securitisation exposure:** Any increase in equity capital resulting from a securitisation transaction shall be deducted from the calculation of CET1. Certain securitisation exposures arise from the provision of credit enhancement by the IIFS as originator by retaining a residual equity interest in a percentage of the securitised asset. In such cases, the capital treatment of the IIFS's residual equity share will be a risk weighting of 1250%.³³
- i. **Investment in the capital of banking, financial and takāful entities:** This derecognising adjustment applies to an investment by an IIFS in the capital of banking, financial or *takāful* entities that are outside the scope of regulatory consolidation. Such investment is addressed and classified under two categories:
- i. *Where the IIFS does not own more than 10% of the issued common shares of the entity: The amounts below the 10% of the IIFS's common equity (after applying all other regulatory adjustments) will not be deducted and will continue to be risk-weighted. Thus, instruments in the trading book shall be treated as per*

³¹ DTAs are amounts of income tax paid which have the effect of reducing the amount of income tax payable in subsequent periods and which are therefore recognised as assets. When DTAs are recognised but their realisation through reduction of future taxes payable is uncertain, they should be deducted from capital.

³² All DTAs that depend on the future profitability of the bank to be realised and that arise from net operating losses are required to be deducted from CET1 in full.

³³ The risk weighting of 1250% will be used irrespective of the minimum capital requirement applicable in the jurisdiction, though it will be subject to supervisory discretion.

the market risk rules, and instruments in the banking book shall be treated as per the standardised approach (or the IRB approach, if applicable).

- ii. *Where the IIFS owns more than 10% of the issued common shares of the entity,³⁴ or the entity is an affiliate³⁵ of the IIFS:* The IIFS shall deduct the amount of the investment in full,³⁶ even if the investment does not fall under the definition of common equity. The deduction should follow the "corresponding deduction" approach – that is, the deduction should be applied to the same component of capital for which the capital would qualify if it were issued by the bank itself.³⁷
- iii. If, under the corresponding deduction approach, an IIFS is required to make a deduction from a particular component of capital and it does not have enough of that component of capital to satisfy that deduction, the shortfall will be deducted from the next-higher components of capital. (For example, if an IIFS does not have enough additional capital to satisfy the deduction, the shortfall will be deducted from CET1.)
- j. **Reciprocal cross-holdings in the capital of banking, financial and takāful entities:** Any cross-holdings of capital that serve to inflate artificially the capital position of an IIFS will be required to be subject to a full deduction, using a "corresponding deduction approach" to such investments. This approach requires the IIFS to apply the deduction to the same component of capital for which the capital would qualify if it were issued by the IIFS itself.
- k. **Zakat obligations:** *Zakat* obligations shall be assessed when an IIFS as an entity has been in operation for at least 12 months. An IIFS shall have a framework³⁸ and mechanism in place for the recognition and measurement of *zakat* obligations and shall disclose the amount of such obligations in its balance sheet. These requirements are, nevertheless, subject to the provisions of applicable national laws, regulatory requirements and applicable accounting standards.

³⁴ Holdings of both the banking book and the trading book should be included in these calculations, after application of all the regulatory adjustments mentioned prior to this category. "Capital" includes common shares and, where applicable, convertible or subordinated *sukūk* that qualify for recognition as regulatory capital.

³⁵ An affiliate of an IIFS is defined as a company that controls, or is controlled by, or is under common control with, the IIFS. Control of a company is defined as: (1) ownership, control, or holding with power to vote 20% or more of a class of voting securities of the company; or (2) consolidation of the company for financial reporting purposes.

³⁶ The objective of this deduction is to prevent the double counting of capital – that is, to ensure that the bank is not boosting its own capital with the capital that is also used to support the banking, *takāful* or other financial subsidiary.

³⁷ This means that the amount to be deducted from common equity should be calculated as the total of all holdings which in aggregate exceed 10% of the IIFS's common equity multiplied by the common equity holdings as a percentage of the total capital holdings. This would result in a common equity deduction which corresponds to the proportion of total capital holdings held in common equity. Similarly, the amount to be deducted from additional capital should be calculated as the total of all holdings which in aggregate exceed 10% of the bank's common equity multiplied by the additional capital holdings as a percentage of the total capital holdings.

³⁸ IIFS may refer to Shari'ah Standard No. 35 issued by the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) for guidance.

SECTION 4: PRINCIPLES FOR MINIMUM CAPITAL REQUIREMENTS

4.1 Credit Risk

126. Credit risk is generally defined as the probability or the likelihood of a recipient of financing or a counterparty failing to meet its obligations as set out in the agreed terms of a transaction. In the Islamic finance domain, credit risk exposures arise from financings provided using various Shari'ah-compliant contracts such as *murābahah*, *salam*, *istisna*, *ijarah* and investments in *sukuk*. Some of these contracts lead to credit risk exposures on account of receivables arising from them; while some other contracts give rise to counterparty credit risk exposures.

127. IIFS may also be exposed to credit risk arising from non-traded equity-like (or) profit-sharing modes of financing, such as those based on *muḍārabah* and *mushārah* contracts. Such financing exposures are usually held for investment purposes and not for trading and hence form part of the banking book of the IIFS concerned. The funds invested through such *muḍārabah*- and *mushārah*-based products may be used to purchase shares in a publicly traded company or privately held equity or investment in a specific project portfolio or through a pooled investment vehicle. In such profit-sharing modes of financing, the IIFS is explicitly exposed to potential impairment of the financing asset or exposure in the event of losses or inadequate returns which do not allow the recipient of financing to meet the repayment obligations set out in such financing contracts. The capital impairment risk with such profit-sharing modes of financing has the nature of credit risk and hence is treated as credit risk as discussed in section 4.1.3.9.

4.1.1 Systems and Controls

128. IIFS are likely to assume credit risk in the course of their normal business activities, as providing financing is one of the primary business activities of most of the IIFS. Given their objective to ensure that their operations are safe and sound and they hold adequate capital at all times to absorb potential losses, IIFS need to manage their credit risk exposures in an effective manner. Consequently, it is of paramount importance for every IIFS to develop and implement a comprehensive and effective risk management framework addressing all risks including, but not limited to, credit risk management systems and controls. The credit risk management framework of an IIFS should aim to ensure that the credit risk associated with every exposure faced by the IIFS and the capital required to absorb potential losses are measured in an accurate manner so that the IIFS will not face a situation of having inadequate capital to absorb potential losses at any point in time.

129. In particular, the credit risk management framework should also include the processes, procedures and methodologies to calculate the applicable regulatory capital requirement for the credit exposures assumed. As a critical part of their sound risk management framework, IIFS should have in place effective internal policies, processes, systems and controls to ensure that the appropriate risk weights are assigned to each and every credit risk exposure faced by them and to calculate the regulatory capital requirement in a prudent manner. This section aims to set out in detail the various elements of the framework to assign the appropriate risk weight to every credit risk exposure assumed by an IIFS and the methodologies for a prudent and credible calculation of the regulatory capital requirement for such exposures.

130. Consistent with the overall basis of this Standard being the final reform as set out in the Consolidated Basel Framework published by the BCBS, the treatment of credit risk exposures and calculation of applicable credit risk capital requirements are based on the standardised approach to credit risk as set out in sections CRE20, CRE21 and CRE22 of the Consolidated Basel Framework.³⁹ In addition, this Standard also sets out bespoke treatment of certain exposures arising from financings made using profit-sharing modes or contracts and included as assets in the banking book. Such exposures are risk-weighted depending on the structure and purpose of the enterprise and the types of assets financed, as prescribed in section 4.1.3.9. The bespoke treatments set out in this Standard are designed to take into account the unique aspects of the credit risk exposures arising from such financings which are not captured in the Consolidated Basel Framework's standardised approach to calculating capital charge for credit risk.

4.1.2 Treatment of Individual Exposures

131. An important guidance on the assessment of credit risk is for IIFS to ensure at all times that they have an adequate understanding, at origination and thereafter on a regular basis (at least annually) up to the maturity of the exposure, of the credit risk profile and characteristics of their counterparties. In cases where ratings from ECAs are used for assigning risk weights, it is essential for the IIFS to carry out their own due diligence to assess the risk of the exposure for risk management purposes and to assess whether the risk weight applied is appropriate and prudent.

³⁹ Banks already authorised by the supervisory authority to use IRB for credit risk in their conventional banking business may, at the supervisor's discretion, be allowed to do so for their Islamic banking business. They will, however, have to comply with the requirement for a capital floor, as described in paragraphs 20.11 to 20.16 of "Risk-Based Capital Requirement" of the Basel Consolidated Framework

132. The sophistication of the due diligence should be appropriate to the size and complexity of IIFS' activities. IIFS must take reasonable and adequate steps to assess the operating and financial performance levels and trends through internal credit analysis and/or other analytics outsourced to a third party, as appropriate for each counterparty. IIFS must be able to access information about their counterparties on a regular basis to complete due diligence analyses.

133. For exposures to entities belonging to consolidated groups, due diligence should, to the extent possible, be performed at the solo entity level to which there is a financing exposure. In evaluating the repayment capacity of the solo entity, IIFS are expected to take into account the support of the group and the potential for it to be adversely impacted by problems in the group.

134. IIFS must be able to demonstrate to their RSAs that their due diligence analyses are appropriate. As part of their supervisory review, RSAs should ensure that IIFS have appropriately performed their due diligence analyses, and should take supervisory measures where these have not been done.

4.1.3 Calculation of Risk-Weighted Assets

135. In accordance with the standardised approach to credit risk in the Consolidated Basel Framework, this standard permits assignment of standardised risk weights to credit exposures of IIFS. For most categories of credit exposures faced by IIFS, the standard allows the use of one of the two following approaches:

- a. external credit risk assessment (ECRA) approach; or
- b. standardised credit risk assessment (SCRA) approach.

136. Of these two approaches, the ECRA approach can be employed only by jurisdictions that allow the use of ratings issued by external credit assessment institutions (ECAIs) that are recognised as eligible for capital adequacy purposes by relevant RSAs in that jurisdiction. Jurisdictions that do not allow the use of ratings issued by ECAIs in assessment of regulatory capital requirements are limited to the use of the SCRA approach, in exposure classes where such an option is available.

137. The assignment of risk weights shall take into consideration the following:

- a. the credit risk rating of a debtor, counterparty or other obligor, or a security, based on the ECRA approach or the SCRA approach, as applicable;

- b. credit risk mitigation techniques adopted by the IIFS;
- c. types of underlying assets that are sold, collateralised or leased by the IIFS; and
- d. the amount of specific provisions made for the overdue portion of accounts receivable or lease payments receivable.

138. In jurisdictions that allow the use of external ratings for capital adequacy purposes, IIFS are expected to refer to their RSA for eligible ECAs whose credit ratings are to be used in assigning credit risk weights.

4.1.3.1 Exposures to sovereigns and central banks

139. Exposures to sovereigns and their central banks should be risk-weighted as shown in Table 2.

Table 2 Risk Weight Table for Sovereigns and Central Banks

External rating ⁴⁰	AAA to AA–	A+ to A–	BBB+ to BBB–	BB+ to B–	Below B–	Unrated
ECA risk score ⁴¹	0 to 1	2	3	4 to 6	7	Unrated
Risk weight	0%	20%	50%	100%	150%	100%

140. The RSAs may permit IIFS to apply a lower risk weight on their exposures to their sovereign (or central bank) of incorporation denominated in domestic currency and funded⁴² in that currency.⁴³ Where this discretion is exercised, other RSAs may also permit their IIFS to apply the same risk weight to domestic currency exposures to this sovereign (or central bank) funded in that currency.

⁴⁰ The notation follows the methodology used by Standard & Poor's (S&P). The use of S&P's credit ratings is an example only; those of other ECAs could equally well be used.

⁴¹ For the purpose of risk-weighting exposures to sovereigns, supervisors may recognise the country risk scores assigned by export credit agencies (ECAs). To qualify, an ECA must publish its risk scores and subscribe to the OECD-agreed methodology. IIFS may choose to use the risk scores published by individual ECAs that are recognised by their supervisor, or the consensus risk scores of ECAs participating in the "Arrangement on Officially Supported Export Credits". The OECD-agreed methodology establishes eight risk score categories associated with minimum export insurance premiums that correspond to various risk weight categories.

⁴² This is to say that the IIFS would also have corresponding liabilities denominated in the domestic currency.

⁴³ This lower risk weight may be extended to the risk-weighting of collateral and guarantees under the credit risk mitigation (CRM) framework.

4.1.3.2 Exposures to non-central government public-sector entities

141. Exposures to domestic public-sector equities (PSEs) will be risk-weighted at national discretion, according to either of the two options contained in Table 3.

Table 3 Risk Weight Table for PSEs

Option 1: Based on external rating of sovereign

External rating of the sovereign	AAA to AA–	A+ to A–	BBB+ to BBB–	BB+ to B–	Below B–	Unrated
Risk weight under Option 1	20%	50%	100%	100%	150%	100%

Option 2: Based on external rating of PSE

Risk weight under Option 2	20%	50%	50%	100%	150%	50%
----------------------------	-----	-----	-----	------	------	-----

142. Subject to national discretion, exposures to certain domestic PSEs⁴⁴ may also be treated as exposures to the sovereigns in whose jurisdictions the PSEs are established. Where this discretion is exercised, other RSAs may allow their banks to risk-weight exposures to such PSEs in the same manner.

4.1.3.3 Exposures to multilateral development banks

143. For the purposes of this standard, a multilateral development bank (MDB) is an institution created by a group of countries that provides financing and professional advice for

⁴⁴ The following examples outline how PSEs might be categorised when focusing on one specific feature – namely, revenue-raising powers. However, there may be other ways of determining the different treatments applicable to different types of PSEs – for instance, by focusing on the extent of guarantees provided by the central government:

- Regional governments and local authorities could qualify for the same treatment as claims on their sovereign or central government if these governments and local authorities have specific revenue-raising powers and have specific institutional arrangements the effect of which is to reduce their risk of default.
- Administrative bodies responsible to central governments, regional governments or local authorities, and other non-commercial undertakings owned by the governments or local authorities, may not warrant the same treatment as claims on their sovereign if the entities do not have revenue-raising powers or other arrangements as described above. If strict lending rules apply to these entities and a declaration of bankruptcy is not possible because of their special public status, it may be appropriate to treat these claims according to Option 1 or 2 for PSEs.
- Commercial undertakings owned by central governments, regional governments or local authorities may be treated as normal commercial enterprises. However, if these entities function as a corporate in competitive markets even though the state, a regional authority or a local authority is the major shareholder of these entities, supervisors should decide to consider them as corporates and therefore attach to them the applicable risk weights.

economic and social development projects. MDB have large sovereign memberships and may include both developed countries and/or developing countries. Each MDB has its own independent legal and operational status, but with a similar mandate and a considerable number of joint owners.

144. A 0% risk weight will be applied to exposures to MDBs that fulfil the requirements of the eligibility criteria provided below. The eligibility criteria for MDBs risk-weighted at 0% are:

- a. very high-quality long-term issuer ratings – that is, a majority of an MDB’s external ratings must be AAA;
- b. either the shareholder structure comprises a significant proportion of sovereigns with long-term issuer external ratings of AA– or better, or the majority of the MDB’s fund-raising is in the form of paid-in equity/capital and there is little or no leverage;
- c. strong shareholder support demonstrated by the amount of paid-in capital contributed by the shareholders; the amount of further capital the MDBs have the right to call, if required, to repay their liabilities; and continued capital contributions and new pledges from sovereign shareholders;
- d. adequate level of capital and liquidity (a case-by-case approach is necessary in order to assess whether each MDB’s capital and liquidity are adequate); and
- e. strict statutory financing requirements and conservative financial policies, which would include (among other conditions) a structured approval process, internal creditworthiness and risk concentration limits (per country, sector, and individual exposure and credit category), large exposures approval by the board or a committee of the board, fixed repayment schedules, effective monitoring of use of proceeds, status review process, and rigorous assessment of risk and provisioning to financing loss reserve.

145. MDBs currently eligible for a 0% risk weight are the Islamic Development Bank; the World Bank Group comprising the International Bank for Reconstruction and Development and the International Finance Corporation; the Multilateral Investment Guarantee Agency; the International Development Association; the Asian Development Bank; the African Development Bank; the European Bank for Reconstruction and Development; the Inter-American Development Bank; the European Investment Bank), the European Investment Fund; the Nordic Investment Bank; the Caribbean Development Bank; the Council of Europe Development Bank; the International Finance Facility for Immunization; and the Asian Infrastructure Investment Bank. In addition to these MDBs, the RSAs for every jurisdiction

are responsible for determining the eligibility of an MDB for 0% risk weight based on the criteria itemised in paragraph 144.

146. MDBs seeking to be added to the list of MDBs eligible for a 0% risk weight in a specific jurisdiction must comply with the AAA rating criterion at the time of their application for such status. Once included in the list of eligible MDBs, the rating may be downgraded, but in no case to lower than AA-. Otherwise, exposures to such MDBs will be subject to the treatment set out in paragraph 147.

147. For exposures to all other MDBs, IIFS incorporated in jurisdictions that allow the use of external ratings for regulatory purposes will assign to their MDB exposures the corresponding “base” risk weights determined by the external ratings according to Table 4. IIFS incorporated in jurisdictions that do not allow external ratings for regulatory purposes will risk-weight such exposures at 50%.

Table 4 Risk Weight Table for MDB Exposures

External rating of counterparty	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
“Base” risk weight	20%	30%	50%	100%	150%	50%

4.1.3.4 Exposures to banks and other IIFS

148. For the purposes of calculating capital requirements, an IIFS exposure to banks and other IIFS is defined as a claim (including financing and investment in *sukuk*, unless considered as eligible regulatory capital component, as dealt with in paragraph 213) on any financial institution that is licensed to take deposits from the public and is subject to appropriate prudential standards and level of supervision. The treatment associated with IIFS equity holdings is dealt with under section 4.1.3.10 (profit-sharing mode of financing and investments).

4.1.3.4.1 Risk weight determination

149. IIFS's exposures to banks and other IIFS should be risk-weighted based on the following hierarchy:⁴⁵

- a. *External credit risk assessment approach:* The ECRA approach is for IIFS incorporated in jurisdictions that allow the use of external ratings for regulatory capital purposes. It applies to all their exposures to other IIFS that are rated. IIFS will apply the methodology for recognition and use of ratings outlined in paragraphs 230 to 248 to determine the application of appropriate ratings for various exposures.
- b. *Standardised credit risk assessment approach:* The SCRA approach is for all exposures of banks and IIFS incorporated in jurisdictions that do not allow the use of external ratings for regulatory purposes. For exposures to banks and other IIFS that are unrated, this approach also applies to IIFS incorporated in jurisdictions that allow the use of external ratings for regulatory purposes.

1.6.5.1 External credit risk assessment approach

150. IIFS incorporated in jurisdictions that allow the use of external ratings for regulatory purposes will assign to their rated exposures⁴⁶ to banks and other IIFS the corresponding "base" risk weights determined by the external ratings according to Table 5. Such ratings must not incorporate assumptions of implicit government support, unless the rating refers to a public bank owned by its government.⁴⁷ IIFS incorporated in jurisdictions that allow the use of external ratings for regulatory purposes must only apply SCRA for their unrated exposures to other IIFS, in accordance with paragraph 153.

⁴⁵ With the exception of exposures giving rise to Common Equity Tier 1, Additional Tier 1 and Tier 2 items, RSAs may allow banks belonging to the same institutional protection scheme (such as mutual, cooperatives or savings institutions) in their jurisdictions to apply a lower risk weight than that indicated by the ECRA and SCRA to their intra-group or in-network exposures provided that both counterparties to the exposures are members of the same effective institutional protection scheme, which is a contractual or statutory arrangement set up to protect those institutions and seeks to ensure their liquidity and solvency to avoid bankruptcy.

⁴⁶ An exposure is rated from the perspective of a bank if the exposure is rated by a recognised "eligible credit assessment institution" which has been nominated by the bank (i.e. the bank has informed its supervisor of its intention to use the ratings of such ECAI for regulatory purposes in a consistent manner (paragraph 103). In other words, if an external rating exists but the credit rating agency is not an ECAI recognised by the national supervisor, or the rating has been issued by an ECAI which has not been nominated by the bank, the exposure would be considered as being unrated from the perspective of the bank.

⁴⁷ "Implicit government support" refers to the notion that the government would act to prevent bank creditors from incurring losses in the event of a bank default or bank distress. RSAs may continue to allow banks to use external ratings which incorporate assumptions of implicit government support for up to a period of five years from the date of implementation of this Standard, when assigning the "base" risk weights in Table to their bank exposures.

Table 5 Risk Weight Table for Exposures to Banks and Other IIFS

External credit risk assessment approach

External rating of counterparty	AAA to AA–	A+ to A–	BBB+ to BBB–	BB+ to B–	Below B–
“Base” risk weight	20%	30%	50%	100%	150%
Risk weight for short-term exposures	20%	20%	20%	50%	150%

151. Exposures to banks and other IIFS with an original maturity of three months or less, as well as exposures to banks and other IIFS that arise from the movement of goods across national borders with an original maturity of six months or less⁴⁸ can be assigned a risk weight that correspond to the risk weights for short-term exposures in Table 5.

152. IIFS must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the bank and IIFS counterparties.⁴⁹

1.6.5.2 Standardised credit risk assessment approach

153. IIFS incorporated in jurisdictions that do not allow the use of external ratings for regulatory purposes will apply the SCRA to all their exposures to banks and other IIFS. The SCRA also applies to unrated bank exposures for banks incorporated in jurisdictions that allow the use of external ratings for regulatory purposes. The SCRA requires IIFS to classify bank exposures into one of three risk-weight buckets (i.e. Grades A, B and C) and assign the corresponding risk weights in Table 6. For the purposes of the SCRA only, “published minimum regulatory requirements” in paragraphs 154 to 160 excludes liquidity standards.

Table 6 Risk Weight Table for Bank Exposures

Standardised credit risk assessment approach

Credit risk assessment of counterparty	Grade A	Grade B	Grade C

⁴⁸ This may include on-balance sheet exposures such as financing and off-balance sheet exposures such as self-liquidating trade-related contingent items.

⁴⁹ If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure (i.e. AAA to AA–; A+ to A–. etc.), the bank must assign a risk weight at least one bucket higher than the “base” risk weight determined by the external rating. Due diligence analysis must never result in the application of a lower risk weight than that determined by the external rating.

“Base” risk weight	40% ⁵⁰	75%	150%
Risk weight for short-term exposures	20%	50%	150%

1.6.5.3 Grade A

154. “Grade A” refers to exposures to banks and other IIFS, where the counterparty has adequate capacity to meet their financial commitments in a timely manner, for the projected life of the assets or exposures, and irrespective of the economic cycles and business conditions.

155. A counterparty bank or IIFS classified into Grade A must meet or exceed the published minimum regulatory requirements and buffers established by its national supervisor as implemented in the jurisdiction where it is incorporated, except for bank-specific minimum regulatory requirements or buffers that may be imposed through supervisory actions (e.g. via Pillar 2) and not made public. If such minimum regulatory requirements and buffers (other than bank-specific minimum requirements or buffers) are not publicly disclosed or otherwise made available by the counterparty bank, then the counterparty bank must be assessed as Grade B or lower.

153. If, as part of its due diligence, an IIFS assesses that a counterparty bank or IIFS does not meet the definition of Grade A in paragraphs 154 and 155, exposures to that counterparty must be classified as Grade B or Grade C.

1.6.5.4 Grade B

156. “Grade B” refers to exposures to banks or other IIFS where the counterparty bank is subject to substantial credit risk, such as repayment capacities that are dependent on stable or favourable economic or business conditions.

157. A counterparty bank classified into Grade B must meet or exceed the published minimum regulatory requirements (excluding buffers) established by its national supervisor as implemented in the jurisdiction where it is incorporated, except for bank-specific minimum regulatory requirements that may be imposed through supervisory actions (e.g. via Pillar 2) and not made public. If such minimum regulatory requirements are not publicly disclosed or

⁵⁰ Under the SCRA approach, exposures to banks without an external credit rating may receive a risk weight of 30%, provided that the counterparty bank has a CET1 ratio that meets or exceeds 14% and a Tier 1 leverage ratio that meets or exceeds 5%. The counterparty bank must also satisfy all the requirements for Grade A classification.

otherwise made available by the counterparty bank, then the counterparty bank must be assessed as Grade C.

158. IIFS will classify all exposures that do not meet the requirements outlined in paragraphs 154 and 155 into Grade B, unless the exposure falls within Grade C under paragraphs 159 and 160.

1.6.5.5 Grade C

159. “Grade C” refers to higher credit risk exposures to banks, where the counterparty bank has material default risks and limited margins of safety. For these counterparties, adverse business, financial or economic conditions are very likely to lead, or have led, to an inability to meet their financial commitments.

160. At a minimum, if any of the following triggers is breached, an IIFS must classify the exposure into Grade C:

- a. The counterparty bank does not meet the criteria for being classified as Grade B with respect to its published minimum regulatory requirements, as set out in paragraphs 156 and 157.
- b. Where audited financial statements are required, the external auditor has issued an adverse audit opinion or has expressed substantial doubt about the counterparty bank’s ability to continue as a going concern in its financial statements or audited reports within the previous 12 months.

Even if these triggers are not breached, an IIFS may assess that the counterparty IIFS meets the definition in paragraph 159. In that case, the exposure to such counterparty bank must be classified into Grade C.

161. Exposures to banks with an original maturity of three months or less, as well as exposures to banks that arise from the movement of goods across national borders with an original maturity of six months or less,⁵¹ can be assigned a risk weight that corresponds to the risk weights for short-term exposures in Table 6.

162. To reflect transfer and convertibility risk under the SCRA, a risk-weight floor based on the risk weight applicable to exposures to the sovereign of the country where the IIFS or bank counterparty is incorporated will be applied to the risk weight assigned to IIFS or bank

⁵¹ This may include on-balance sheet exposures such as financing and off-balance sheet exposures such as self-liquidating trade-related contingent items.

exposures. The sovereign floor applies when the exposure is not in the local currency of the jurisdiction of incorporation of the counterparty IIFS or bank and, for a financing transacted in a branch of the counterparty IIFS or bank in a foreign jurisdiction, when the exposure is not in the local currency of the jurisdiction in which the branch operates. The sovereign floor will not apply to short-term (i.e. with a maturity below one year) self-liquidating, trade-related contingent items that arise from the movement of goods.

4.1.3.5 Exposures to securities firms and other financial institutions

163. Exposures to securities firms and other financial institutions will be treated as exposures to banks provided that these firms are subject to prudential standards and to a level of supervision equivalent to those applied to banks (including capital and liquidity requirements). RSAs should determine whether the regulatory and supervisory framework governing securities firms and other financial institutions in their own jurisdictions is equivalent to that which is applied to IIFS in their own jurisdictions. Where the regulatory and supervisory framework governing securities firms and other financial institutions is determined to be equivalent to that applied to IIFS in a jurisdiction, other RSAs may allow their IIFS to risk-weight such exposures to securities firms and other financial institutions as exposures to banks. Exposures to all other securities firms and financial institutions will be treated as exposures to corporates.

4.1.3.6 Exposures to corporates

164. For the purposes of calculating capital requirements, exposures to corporates include exposures (financing and investment) to incorporated entities, associations, partnerships, proprietorships, trusts, funds and other entities with similar characteristics, except those which qualify for one of the other exposure classes. The treatment associated with IIFS equity exposures to these counterparties is addressed in paragraphs 211 to 212 in this section of the Standard. The corporate exposure class includes exposures to insurers, *takaful* companies and other financial corporates that do not meet the definitions of exposures to banks, or securities firms and other financial institutions, as determined above in paragraphs 148 and 163, respectively. The corporate exposure class does not include exposures to individuals, and class differentiates between the following subcategories:

- general corporate exposures; and
- specialised financing exposures, as defined in paragraph 170.

4.1.3.6.1 General corporate exposures

1.6.5.6 Risk weight determination

165. For corporate exposures of IIFS incorporated in jurisdictions that allow the use of external ratings for regulatory purposes, the IIFS may assign “base” risk weights according to Table 7.⁵² IIFS must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the counterparties. IIFS which have assigned risk weights to their rated bank exposures based on ECRA must assign risk weights for all their corporate exposures according to Table 7.⁵³

166. Unrated corporate exposures of IIFS incorporated in jurisdictions that allow the use of external ratings for regulatory purposes will receive a 100% risk weight, with the exception of unrated exposures to corporate small and medium entities (SMEs), as described in paragraph 169.

Table 7 Risk Weight Table for Corporate Exposures

Jurisdictions that use external ratings for regulatory purposes

External rating of counterparty	AAA to AA–	A+ to A–	BBB+ to BBB–	BB+ to BB–	Below BB–	Unrated
“Base” risk weight	20%	50%	75%	100%	150%	100%

167. For corporate exposures of IIFS incorporated in jurisdictions that do not allow the use of external ratings for regulatory purposes, IIFS will assign a 100% risk weight to all corporate exposures, with the exception of:

- exposures to corporates identified as “investment grade” in paragraph 168; and
- exposures to corporate SMEs (paragraph 169).

IIFS must apply the treatment set out in this paragraph to their corporate exposures if they have assigned risk weights to their rated bank exposures based on paragraph 153.

⁵² An exposure is rated from the perspective of a bank if the exposure is rated by a recognised eligible credit assessment institution which has been nominated by the bank (i.e. the bank has informed its supervisor of its intention to use the ratings of such ECAI for regulatory purposes in a consistent manner) paragraph 236). In other words, if an external rating exists but the credit rating agency is not an ECAI recognised by the national supervisor, or the rating has been issued by an ECAI that has not been nominated by the bank, the exposure would be considered as being unrated from the perspective of the bank.

⁵³ If the due diligence analysis reflects higher risk characteristics than that implied by the external rating bucket of the exposure (i.e. AAA to AA–; A+ to A–, etc.), the bank must assign a risk weight at least one bucket higher than the “base” risk weight determined by the external rating. Due diligence analysis must never result in the application of a lower risk weight than that determined by the external rating.

168. IIFS in jurisdictions that do not allow the use of external ratings for regulatory purposes may assign a 65% risk weight to exposures to “investment-grade” corporates.⁵⁴

169. For unrated exposures to corporate SMEs,⁵⁵ an 85% risk weight will be applied. Exposures to SMEs that meet the criteria in paragraph 179 will be treated as regulatory retail SME exposures and be risk-weighted at 75%.

4.1.3.6.2 *Specialised financing*

170. A corporate exposure will be treated as a specialised financing exposure if such financing possesses some or all of the following characteristics, either in legal form or economic substance:

- a. The exposure is not related to real estate and is within the definitions of object finance, project finance or commodities finance under paragraph 172. If the activity is related to real estate, the treatment would be determined in accordance with paragraphs 183 to 198.
- b. The exposure is typically to an entity (often a special purpose vehicle, or SPV) that was created specifically to finance and/or operate physical assets.
- c. The counterparty has few 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. The primary source of repayment of the obligation is the income generated by the asset(s), rather than the independent capacity of the entity receiving the financing.
- d. The terms of the obligation give the counterparty a substantial degree of control over the asset(s) and the income that it generates.

171. The eligibility of specialised financing exposures should be solely based on the legal form and economic substance of the transaction as outlined above.

⁵⁴ An “investment-grade” corporate is a corporate entity that has adequate capacity to meet its financial commitments in a timely manner and its ability to do so is assessed to be robust against adverse changes in the economic cycle and business conditions. When making this determination, the bank should assess the corporate entity against the investment grade definition, taking into account the complexity of its business model, performance against industry and peers, and risks posed by the entity’s operating environment. Moreover, the corporate entity (or its parent company) must have securities outstanding on a recognised securities exchange.

⁵⁵ Corporate SMEs are defined as corporate exposures where the reported annual sales for the consolidated group of which the corporate counterparty is a part is less than or equal to €50 million for the most recent financial year.

172. Exposures described in paragraph 170 will be classified into one of the following three subcategories of specialised financing, irrespective of the Shari'ah-compliant contract employed for delivering the financing: project finance; object finance; or commodities finance.

173. **“Project finance”** refers to a method of funding in which the IIFS looks primarily to the revenues generated by a single project, both as the source of repayment and as security for the financing. This type of financing is usually for large, complex and expensive installations such as power plants, chemical processing plants, mines, transportation infrastructure, environment, media and telecoms. Project finance may also take the form of financing for the construction of a new capital installation, or refinancing of an existing installation, with or without improvements.

174. In such transactions, IIFS are normally paid solely from the proceeds generated by the project being financed, such as electricity sold by a power plant. The obligor is usually an SPV that is not permitted to perform any function other than developing, owning and operating the installation. In contrast, if repayment of the exposure depends primarily on a well-established, diversified, creditworthy, contractually obligated corporate end-user, it is considered a collateralised claim on the corporate.

175. **“Object finance”** refers to the method of funding the acquisition of equipment (e.g. ships, aircraft, satellites, railcars and fleets) where the repayment of the financing is dependent on the cash flows generated by the specific assets that have been financed and pledged or assigned to the IIFS. A primary source of these cash flows might be rental or lease contracts with one or several third parties. In contrast, if the exposure is to an obligor whose financial condition and debt-servicing capacity enables it to repay the debt without undue reliance on the specifically pledged assets, the exposure should be treated as a collateralised corporate exposure.

176. **“Commodities finance”** refers to short-term financing to finance reserves, inventories (e.g. crude oil, metals or crops), where the exposure will be repaid from the proceeds of the sale of the commodity and the counterparty has no independent capacity to repay the exposure. The structured nature of the financing is also designed to compensate for potential concerns relating to credit quality of the obligor. The exposure's rating reflects its self-liquidating nature and the IIFS's skill in structuring the transaction rather than the credit quality of the obligor.

177. IIFS incorporated in jurisdictions that allow the use of external ratings for regulatory purposes will assign to their specialised financing exposures the risk weights determined by

the *issue-specific* external ratings, if these are available, according to Table 8. Issuer ratings must not be used (i.e. paragraph 228 does not apply in the case of specialised financing exposures).

Table 8 Exposures to Project Finance, Object Finance and Commodities Finance		
Exposure (Excluding Real Estate)	Project Finance	Object and Commodity Finance
Issue-specific ratings available and permitted	Using RWAs applicable for general corporate exposures (see Table 7)	
Rating not available or not permitted	130% pre-operational phase 100% operational phase ⁵⁶ 80% operational phase (high quality) ⁵⁷	100%

4.1.3.7 Retail exposures

178. Retail exposures are exposures to an individual person or persons, or to regulatory retail SMEs.⁵⁸ Retail exposures secured by real estate will be treated according to

⁵⁶ “Operational phase” is defined as the phase in which the entity that was specifically created to finance the project has (i) a positive net cash flow that is sufficient to cover any remaining contractual obligation, and (ii) declining long-term financing.

⁵⁷ A “high-quality project finance exposure” refers to an exposure to a project finance entity that is able to meet its financial commitments in a timely manner and its ability to do so is assessed to be robust against adverse changes in the economic cycle and business conditions. The following conditions must also be met: (a) the project finance entity is restricted from acting to the detriment of the financiers (e.g. by not being able to secure additional financing without the consent of existing financiers); (b) the project finance entity has sufficient reserve funds or other financial arrangements to cover the contingency funding and working capital requirements of the project; (c) the revenues are availability-based or subject to a rate-of-return regulation or take-or-pay contract; (d) the project finance entity’s revenue depends on one main counterparty, which shall be a central government, PSE or a corporate entity with a risk weight of 80% or lower; (e) the revenues are availability-based or subject to a rate-of-return regulation or take-or-pay contract; (f) the project finance entity’s revenue depends on one main counterparty, which shall be a central government, PSE or a corporate entity with a risk weight of 80% or lower; (g) the contractual provisions governing the exposure to the project finance entity provide for a high degree of protection for financiers in case of a default of the project finance entity; (h) the main counterparty or other counterparties which similarly comply with the eligibility criteria for the main counterparty will protect the creditors from the losses resulting from a termination of the project; and (i) financiers may assume control of the project finance entity in case of its default.

⁵⁸ Regulatory retail SMEs are SMEs that meet the requirements set out in paragraph 179. In some jurisdictions (e.g. emerging economies), RSAs might deem it appropriate to define SMEs in a more conservative manner (i.e. with a lower level of sales).

paragraphs 183 to 198. All other retail exposures will be treated as outlined in paragraphs 179 to 182.

4.1.3.7.1 Regulatory retail portfolio

179. Regulatory retail portfolios (RRP) are exposures that meet all of the criteria listed below and shall be risk-weighted at 75%. Defaulted retail exposures are to be excluded from the overall regulatory retail portfolio when assessing the granularity criterion.

- a. *Product criterion:* The exposure takes the form of any of the following Shari'ah-compliant products: revolving financing facilities (including credit cards and cash lines), personal term financing and other term financing (e.g. instalment financing, vehicle financing, student and educational financing, and personal financing), and financing facilities to small business. However, investment in *sukuk* and equity securities that are listed or not listed shall be excluded from this portfolio. Qualifying residential real estate (RRE) exposures shall be subject to the treatment under paragraphs 186 to 198.
- b. *Low value of individual exposures:* The aggregate exposure to one counterparty (excluding RRE financing) cannot exceed €1 million.
- c. *Granularity criterion:* No aggregated exposure to one counterparty⁵⁹ can exceed 0.2%⁶⁰ of the overall regulatory retail portfolio, unless RSAs have determined another method to ensure satisfactory diversification of the regulatory retail portfolio.

180. "Regulatory retail" exposures which meet the criteria in paragraph 179 that arise from obligors who qualify as transactors will be risk-weighted at 45%. Transactors are obligors in relation to facilities such as credit cards where the balance has been repaid in full at each scheduled repayment date for the previous 12 months. Obligors in relation to Shari'ah-compliant retail financing facilities would also be considered as transactors if there have been no drawdowns over the previous 12 months.

181. "*Other retail*": Any other retail financing exposures to an individual person or persons that do not meet all of the criteria in paragraph 179 will be risk-weighted at 100%.

⁵⁹ "Aggregated exposure" means gross amount (i.e. not taking any credit risk mitigation into account) of all forms of retail exposures, excluding residential real estate exposures. In case of off-balance sheet claims, the gross amount would be calculated after applying credit conversion factors. In addition, "to one counterparty" means one or several entities that may be considered as a single beneficiary (e.g. in the case of a small business that is affiliated with another small business, the limit would apply to the IIFS's aggregated exposure on both businesses).

⁶⁰ To avoid circular calculations, the granularity criterion will be verified only once. The calculation must be done on the portfolio of retail exposures that meet the product and orientation criteria as well as the low value of the exposure.

182. Exposures to SMEs that do not meet all of the criteria in paragraph 179 will be treated as corporate SMEs' exposures under paragraph 169, unless secured by real estate.

4.1.3.7.2 *Real estate portfolio*

183. Real estate exposures are exposures of IIFS that include various types of financing⁶¹ or investment⁶² in completed and under-construction properties, as well as land used for such purposes. Real estate investment activity involves, among other things, the purchase, sale and development of land, as well as of residential and non-residential buildings.

184. The risk weights in Tables 8, 9, 10 and 11 and the approaches set out in paragraphs 187 and 195 will apply to jurisdictions where structural factors result in sustainably low credit losses associated with the exposures to the real estate market. RSAs should evaluate whether the risk weights in the corresponding risk weight tables are too low for these types of exposures in their jurisdictions based on default experience and other factors such as market price stability. RSAs may require IIFS in their jurisdictions to increase these risk weights as appropriate.

185. To apply the risk weights in Tables 9, 10, 11 and 12 and the approaches set out in paragraphs 187 and 195, the financing must meet the following requirements:

- a. *Finished property*: The property securing the exposure must be fully completed. This requirement does not apply to forest and agricultural land. Subject to national discretion, RSAs may apply the risk-weight treatment described in paragraphs 186 and 187 for financing to individuals that are secured by residential property under construction or land upon which residential property would be constructed, provided that: (i) the property is a one-to-four family residential housing unit that will be the primary residence of the counterparty and the financing to the individual is not, in effect, indirectly financing land acquisition, development and construction exposures;

⁶¹ "Financing of real estate" refers to an IIFS providing financing as a part of usual financial intermediation activities to generate revenues from scheduled payments made by its customers. Similar to other types of financing, real estate financing exposes the IIFS to a variety of risks, requiring effective risk management practices to be in place. In the case of an IMB contract, since the customers intend ultimately to purchase the underlying asset, the assets held by the IIFS under such a contract during the lease period will be considered as part of financial intermediation activities.

⁶² "Investment in real estate" essentially refers to an IIFS investing in immovable properties when the IIFS invests its own and/or customers' funds directly in real estate assets or in real estate projects (or in partnerships in real estate or real estate projects) for commercial purposes to achieve profits from property development, or to benefit from asset price appreciation. In the case of an operating *ijarah* contract, though an IIFS leases a specified asset to the customer for an agreed period against specified instalments of lease rental, the market or price risk attached to the residual value of the leased asset at the end of the contract remains with the IIFS.

or (ii) where the sovereign or PSEs involved have the legal powers and a bility to ensure that the property under construction will be finished.

- b. *Legal enforceability:* Any claim on the property taken must be legally enforceable in all relevant jurisdictions. The collateral agreement and the legal process underpinning it must be such that they provide for the IIFS to realise the value of the property within a reasonable time frame.
- c. *Claims over the property:* The financing is a claim over the property where the IIFS holds a first charge over the property financed by the IIFS.
- d. *Ability of the counterparty to repay:* The counterparty must have the capacity to repay the financing, and this must be well documented before the contract is executed by the IIFS.
- e. *Prudent value of property:* The property will be maintained at the value measured at origination unless RSAs elect to require IIFS to revise the property value downward to reflect any extraordinary or idiosyncratic event that occurs which resulted in a permanent reduction of the property value. Modifications made to the property that unequivocally increase its value could also be considered in calculating the financing-to-value (FTV) ratio.⁶³ In valuing the property, the valuation must be appraised independently using prudently conservative valuation criteria.⁶⁴
- f. *Required documentation:* All the information required at origination of the financing and for monitoring purposes must be properly documented, including information on the ability of the counterparty to repay and on the valuation of the property.

4.1.3.7.2.1 Residential real estate(RRE) portfolio

186. A residential real estate exposure arises from a financing that is fully secured by the underlying RRE asset or secured by mortgages on RRE property, which may either be occupied by the obligor, or may be rented. Such exposures may be carved-out from the regulatory retail portfolio referred in paragraph 179, provided that the criteria listed in paragraph 185 are met. The applicable risk weight to be assigned to the total exposure amount will be determined based on the exposure's FTV ratio in Table 9.

⁶³ The FTV ratio is the amount of the financing divided by the value of the property. When calculating the FTV ratio, the exposure amount will be reduced as the financing is being repaid.

⁶⁴ To ensure that the value of the property is appraised in a prudently conservative manner, the valuation must exclude expectations on price increases and must be adjusted to take into account the potential for the current market price to be significantly above the value that would be sustainable over the life of the exposure. RSAs should provide guidance setting out prudent valuation criteria where such guidance does not already exist under national law. If a market value can be determined, the valuation should not be higher than the market value.

Table 9 Risk Weight Table for Residential Real Estate Exposures

(Repayment is not materially dependent on cash flows generated by property)

	FTV ≤ 50%	50% < FTV ≤ 60%	60% < FTV ≤ 80%	80% < FTV ≤ 90%	90% < FTV ≤ 100%	FTV > 100%
Risk weight	20%	25%	30%	40%	50%	70%

187. As an alternative to the approach in paragraph 186 for RRE exposures compliant with criteria in paragraph 185, jurisdictions may apply a risk weight of 20% to the part of the exposure up to 55% of the property value and the risk weight of the counterparty as prescribed in footnote 66 to the residual exposure.⁶⁵ Where there are liens on the property that are not held by the IIFS, the treatment is as follows:

- a. *Case 1:* The IIFSS holds the junior lien and there are senior liens not held by the IIFS. When the value of all liens exceeds 55% of the property value, the amount of the IIFS's lien that is eligible for the 20% risk weight should be calculated as the maximum of: (i) 55% of the property value minus the amount of the senior liens; and (ii) zero. For example, for a financing exposure of €70,000 to an individual secured on a property valued at €100,000, the IIFS will apply a risk weight of 20% to €45,000 (=max (€55,000 – €10,000, 0)) of the exposure and, according to footnote 66, a risk weight of 75% to the residual exposure of €25,000. When the value of all liens does not exceed 55% of the property value, a risk weight of 20% will be applied to the IIFS's exposure.
- b. *Case 2:* There are liens not held by the IIFS that rank pari passu with the IIFS's lien and there are no other senior or junior liens. When the value of all liens exceeds 55% of the property value, the part of the IIFS's exposure that is eligible for the 20% risk weight should be calculated as the product of: (i) 55% of the property value; and (ii) the IIFS's exposure divided by the sum of all pari passu liens. For example, for a financing exposure of €70,000 to an individual secured on a property valued at €100,000, where

⁶⁵ For example, for a financing exposure of €70,000 to an individual secured on a property valued at €100,000, the IIFS will apply a risk weight of 20% to €55,000 of the exposure and, according to footnote 66, a risk weight of 75% to the residual exposure of €15,000. This gives total risk-weighted assets for the exposure of €22,250 = (0.20 * €55,000) + (0.75 * €15,000).

there is also a pari passu ranking lien of €10,000 held by another institution, the bank will apply a risk weight of 20% to €48,125 ($=€55,000 * €70,000/€80,000$) of the exposure and, according to footnote 66, a risk weight of 75% to the residual exposure of €21,875. When the value of all liens does not exceed 55% of the property value, a risk weight of 20% will be applied to the IIFS's exposure.

188. For RRE exposures where any of the requirements in paragraph 185 are not met, the risk weight applicable will be the risk weight of the counterparty.⁶⁶

189. When the prospects for servicing the financing exposure materially depend⁶⁷ on the cash flows generated by the property securing the exposure rather than on the underlying capacity of the counterparty to repay the exposure from other sources, the exposure will be risk-weighted as follows:

- a. if the requirements in paragraph 185 are met, according to the FTV ratio as set out in Table 10; and
- b. if any of the requirements of paragraph 185 are not met, at 150%.

190. The primary source of these cash flows would generally be lease or rental payments, or the sale of the residential property. The distinguishing characteristic of these exposures compared to other RRE exposures is that both the repayment of the exposure and the prospects for recovery in the event of default depend materially on the cash flows generated by the property securing the exposure.

Table 10 Risk Weight Table for Residential Real Estate Exposures

(Repayment is materially dependent on cash flows generated by property)

	FTV ≤ 50%	50% < FTV ≤ 60%	60% < FTV ≤ 80%	80% < FTV ≤ 90%	90% < FTV ≤ 100%	FTV > 100%
Risk weight	30%	35%	45%	60%	75%	105%

⁶⁶ For exposures to individuals, the risk weight applied will be 75%. For exposures to SMEs, the risk weight applied will be 85%. For exposures to other counterparties, the risk weight applied is the risk weight that would be assigned to an unsecured exposure to that counterparty.

⁶⁷ It is expected that the material dependence condition would predominantly apply to exposure to corporates, SMEs or SPVs, but is not restricted to those counterparty types. As an example, a financing exposure may be considered materially dependent if more than 50% of the income from the counterparty used in the bank's assessment of its ability to repay the exposure is from cash flows generated by the residential property. RSAs may provide further guidance setting out criteria on how material dependence should be assessed for specific exposure types.

191. The following types of exposures are excluded from the treatment described in paragraph 189 and, instead, are subject to the treatment described in paragraphs 184 to 186:

- c. an exposure secured by a property that is the recipient of financing's primary residence;
- d. an exposure secured by an income-producing residential housing unit, to an individual who has mortgaged less than a certain number of properties or housing units, as specified by RSAs;
- e. an exposure secured by residential real estate property to associations or cooperatives of individuals that are regulated under national law and exist with the only purpose of granting their members the use of a primary residence in the property securing the financing exposure; and
- f. an exposure secured by residential real estate property to public housing companies and not-for-profit associations regulated under national law that exist to serve social purposes and to offer tenants long-term housing.

192. The RSAs should require IIFS to apply a risk weight multiplier to retail and residential estate exposures with a currency mismatch. For instance, IIFS that have unhedged retail and residential real estate exposures to individuals where the financing currency differs from the currency of the recipient of financing's source of income will apply a 1.5 times multiplier to the applicable risk weight as stated in paragraphs 178 to 182 and 186 to 192, subject to a maximum risk weight of 150%.

4.1.3.7.2.2 Exposures secured by commercial real estate

193. A commercial real estate exposure is an exposure secured by any immovable property that is not a residential real estate as defined in paragraph 186.

194. Where the requirements in paragraph 185 are met, and provided that paragraphs 197 and 198 are not applicable, the risk weight to be assigned to the total exposure amount will be determined based on the exposure's FTV ratio as shown in Table 11. For the purpose of paragraphs 191 to 193, "risk weight of the counterparty" refers to 75% for exposures to individuals, and 85% for exposures to SMEs. For exposures to other counterparties, the risk weight applied is the risk weight that would be assigned to an unsecured exposure to that counterparty.

Table 11 Risk Weight Table for Commercial Real Estate Exposures

(Repayment is not materially dependent on cash flows generated by property)

	FTV ≤ 60%	FTV > 60%
Risk weight	Min (60%, RW of counterparty)	RW of counterparty

195. As an alternative to the approach described in paragraph 194, where the requirements in paragraph 185 are met, jurisdictions may apply a risk weight of 60% or the risk weight of the counterparty, whichever is lower, to the part of the exposure measuring up to 55% of the property value⁶⁸. For the residual portion of the exposure exceeding 55% of the property value the risk weight of the counterparty must be applied.

196. Where any of the requirements in paragraph 185 are not met, the risk weight applied will be the risk weight of the recipient of financing.

197. When the prospects for servicing the financing exposure materially depend⁶⁹ on the cash flows generated by the property securing the financing exposure, rather than on the underlying capacity of the recipients of financing to settle the financing exposure from other sources,⁷⁰ the exposure will be risk-weighted as follows:⁷¹

- g. if the requirements in paragraph 185 are met, according to the FTV ratio as set out in Table 12; and
- h. if any of the requirements of paragraph 185 are not met, at 150%.

⁶⁸ Where there are liens on the property that are not held by the bank, the part of the exposure up to 55% of the property value should be reduced by the amount of the senior liens not held by the bank and by a pro-rata percentage of any liens *pari passu* with the bank's lien but not held by the bank. See paragraph 187 for examples of how this methodology applies in the case of residential retail exposures.

⁶⁹ It is expected that the material dependence condition will predominantly apply to financing to corporates, SMEs or SPVs, but is not restricted to those recipients of financing types. As an example: a financing may be considered materially dependent if more than 50% of the income from the recipients of the financing used in the IIFS's assessment of its ability to repay the financing is from cash flows generated by the commercial property. RSAs may provide further guidance, setting out criteria on how material dependence should be assessed for specific exposure types.

⁷⁰ For such exposures, RSAs may allow IIFS to apply the treatment described in paragraphs 194 to 195 subject to the following conditions: (i) the losses stemming from commercial real estate exposure up to 60% of FTV must not exceed 0.3% of the outstanding exposure in any given year; and (ii) overall losses stemming from commercial real estate exposure must not exceed 0.5% of the outstanding exposure in any given year. If either of these tests are not satisfied in a given year, the eligibility of the exemption will cease and the exposures where the prospect for servicing the financing exposure materially depend on cash flows generated by the property securing the exposure, rather than on the underlying capacity of the counterparty to repay the financing exposure from other sources, will again be risk-weighted according to paragraph 197 until both tests are satisfied again in the future. Jurisdictions applying such treatment must publicly disclose whether these conditions are met.

⁷¹ RSAs may require that the risk weight treatment described in paragraph 197 be applied to exposures where the servicing of the financing exposure materially depends on the cash flows generated by a portfolio of properties owned by the counterparty.

198. The primary source of these cash flows would generally be lease or rental payments, or the sale of the commercial property. The distinguishing characteristic of these exposures compared to other commercial real estate exposures is that both the servicing of the financing exposure and the recovery in the event of default depend materially on the cash flows generated by the property securing the financing exposure.

Table 12 Risk Weight Table for Commercial Real Estate Exposures

(Repayment is materially dependent on cash flows generated by property)

	FTV ≤ 60%	60% < FTV ≤ 80%	FTV > 80%
Risk weight	70%	90%	110%

4.1.3.8 Off-balance sheet exposures

199. Off-balance sheet items shall be converted into credit exposure equivalents through the use of credit conversion factors.

200. Commitments with an original maturity up to one year and those with an original maturity over one year will receive a CCF of 20% and 50%, respectively. However, any commitments that are unconditionally cancellable at any time by the IIFS without prior notice, or that effectively provide for automatic cancellation due to deterioration in the creditworthiness of the recipients of financing, will receive a 10% CCF. RSAs should evaluate various factors in their jurisdiction, which may constrain IIFS's ability to cancel the commitment in practice and consider applying a higher CCF to certain commitments as appropriate.

201. An import or export financing which is based on *murābahah* where the underlying goods/shipment are collateralised and insured shall attract a 20% CCF to the IIFS that issues or confirms the letter of credit. This treatment of collateral assumes there are no obstacles to the exercise of rights over it by the issuer or confirmer. (See section 4.1.5 for a discussion of pledge of assets as collateral.)

202. Sharī'ah-compliant alternatives to repurchase agreements⁷² (if any) will receive a CCF of 100%. Further, a CCF of 50% will be applied to certain transaction-related contingent items such as performance bonds, bid bonds and warranties. Direct credit substitutes, such

⁷² Refer to the AAOIFI Sharī'ah standard on repurchase agreements.

as standby letters of credit serving as financial guarantees against financing and securities, or irrevocable credit commitments, will receive a CCF of 100%.

203. Sharī'ah-compliant hedging contracts⁷³ that are traded over-the-counter (OTC) expose an IIFS to counterparty credit risk (CCR). CCR refers to 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 had a positive economic value at the time of default. Unlike a firm's exposure to credit risk through a financing arrangement, where the exposure to credit risk is unilateral and only the IIFS financing the transaction faces the risk of loss, CCR involves a bilateral risk of loss; that is, the market value of the transaction can be positive or negative to either counterparty to the transaction, depending on the movements in the market prices of the underlying variables.

204. A credit equivalent amount for Sharī'ah-compliant hedging techniques is to be calculated under the Standardised Approach for Counterparty Credit Risk, issued in March 2014 by the BCBS.⁷⁴ The credit-equivalent exposure is based on the positive mark-to-market replacement cost of the contract. An add-on factor will be used to cover for potential future credit exposure.

4.1.3.9 Exposures in investments made under profit-sharing modes

205. An IIFS may provide financing and hold investments made under profit- and loss-sharing modes (*mushārah*) or profit-sharing and loss-bearing (*muḍārah*) which may be used, inter alia, to invest in the following:

- (a) a commercial enterprise to undertake a business venture (with the intention of holding the investment for an indefinite period or with a view to eventual sale, such as venture capital investments or privately held equity);
- (b) diminishing *mushārah* in which the share of the IIFS can be gradually reduced during the tenure of the contact until the asset is fully sold to the partner(s);
- (c) an equity investment in a company or an Islamic collective investment scheme not held for short-term resale or trading purposes;⁷⁵
- (d) a specific project; or

⁷³ Sharī'ah-compliant hedging instruments are Sharī'ah-compliant alternatives to derivative contracts.

⁷⁴ <https://www.bis.org/publ/bcbs279.pdf>:SA-CCR

⁷⁵ Banking book investments would not normally include investments in *listed* common shares or *listed* Islamic collective investment schemes, which would instead be held in the trading book.

- (e) a joint ownership of real assets or movable assets (such as cars) on a *mushārah* basis for onward lease or sale on an *ijārah* or a *murābahah* basis, respectively (i.e. *mushārah* with an *ijārah* or *murābahah* subcontract).

206. This section covers such exposures of the IIFS that are held not for trading but for the purpose of earning investment returns from medium to long-term financing (i.e. held in the "banking book"). Such investments are:

- (a) not held with the intent of trading or short-term resale benefiting from actual or expected price movements (as in (a), above);
- (b) not marked-to-market on a daily basis;
- (c) not actively monitored with reference to market sources; and
- (d) exposed to credit risk in the form of capital impairment risk.⁷⁶

207. In assigning the risk weight, consideration shall be given to the intent of the profit-sharing investment, and to the nature of the underlying assets. For the purpose of determining minimum capital requirements, the risk weight shall be applied based on sections 4.1.3.9.1 to 4.1.3.9.5.

4.1.3.9.1 *Commercial enterprise to undertake a business venture*

208. Financing on a *mushārah* or *muḍārabah* basis of a commercial enterprise to undertake a business venture can expose an IIFS to credit risk in the form of capital impairment, to an extent that depends on the structure and purpose of the financing and the types of assets financed. Commonly, an IIFS would invest in a commercial enterprise with the intention of holding the investment for an indefinite period or with a view to eventual sale (as in the case of venture capital or private equity investments). Given the nature of investment being that of an equity investor, the IIFS's rights and entitlements are subordinated to the claims of secured and unsecured creditors.

209. Capital impairment risk is the risk of losing the amount invested in an enterprise or in the ownership of an asset. Such impairments may arise for two kinds of reasons: (a) the investee may be unprofitable, so that the investor IIFS fails to recover its investment; and (b) the *mushārah* partner or *muḍārib* may fail either: (i) to pay the IIFS's share in the profit on a periodical basis, as contractually agreed; or (ii) to settle the IIFS's entitlement to its share

⁷⁶ As mentioned in paragraphs 48 and 55 of IFSB-1, under both *mushārah* and *muḍārabah* financings, the capital invested by the provider of finance is not guaranteed as it is not a debt, but is explicitly exposed to impairment in the event of losses – that is, to capital impairment risk.

of the capital and the profits at the time of redemption. The impairment of capital arising due to unprofitable business of the enterprise or asset financed does not involve any credit default; whereas the failure of the partner to meet its contractual obligations will be an incidence of credit default.

210. Bearing in mind the relatively risky nature of financing based on profit-sharing modes, RSAs may set out specific prudential guidelines on the systems and controls for risk management related to the modes, where IIFS invest investment account holders' funds in such financing either directly or by commingling the funds of IAH with those of shareholders in such financing. Unrestricted investment account holders typically have a small risk appetite and are content with an investment which has a relatively low risk and low returns.

211. The risk weight for such investments shall be calculated according to either of the following methods:

- a. the simple risk-weight method, which treats the investment as an equity exposure held in the banking book; or
- b. the supervisory slotting method, which considers the investment as a type of specialised financing.

Simple risk-weight method

212. IIFS shall assign a risk weight of 250% for its *mushārah* or *muḍārah* investments in commercial enterprises. However, a risk weight of 400% shall be assigned if the investment meets the definition of unlisted equity exposure.⁷⁷ RSAs may allow IIFS to assign a risk weight of 100% to equity holdings made pursuant to national legislated programmes that provide significant subsidies for the investment to the bank and involve government oversight and restrictions on the equity investments. Such treatment can only be accorded to equity holdings up to an aggregate of 10% of the bank's combined Tier 1 and Tier 2 capital.⁷⁸ As with other types of financing, an IIFS can use eligible Sharī'ah-compliant risk mitigation techniques in profit-sharing financing to reduce the credit exposure and risk of possible

⁷⁷ Speculative unlisted equity exposures are defined as equity investments in unlisted companies that are invested for short-term resale purposes or are considered venture capital or similar investments which are subject to price volatility and are acquired in anticipation of significant future capital gains.

⁷⁸ Examples of restrictions are limitations on the size and types of businesses in which the bank is investing, allowable amounts of ownership interests, geographical location, and other pertinent factors that limit the potential risk of the investment to the bank.

capital impairment. The use of such risk mitigation and subsequent reduction in credit exposure shall be taken into account when calculating the capital requirements of the IIFS.⁷⁹

213. IIFS should assign a risk weight of 150% for exposures to subordinated capital instruments (*sukuk*) other than equities. Any liabilities that meet the definition of “other TLAC liabilities” in the Basel Framework and that are not deducted from regulatory capital should be considered to be subordinated capital instruments for the purposes of this paragraph.

Supervisory slotting method

214. In appropriate cases related mostly to the project finance or business ventures, the supervisor may permit an IIFS to employ an alternative approach – namely, the supervisory slotting criteria. Under this method, an IIFS is required to map its internal risk grades into four supervisory categories as set out in Table 13. (Appendix D details the supervisory slotting method for specialised financing.) Each of these categories will be associated with a specific risk weight, as given in the following. These risk weights include an additional fixed factor of 20% RW to cater for the potential decline in the *muḍārabah*'s or *mushārah*'s net asset value.

Table 13 Supervisory Categories

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

4.1.3.9.2 Diminishing mushārah

215. This form of *mushārah* is a mechanism whereby an IIFS can provide term financing to a customer on a profit-sharing basis. The IIFS enters into this type of *mushārah* with the objective of transferring the ownership to the customer, where the IIFS acts initially as joint-owner of the asset, and the customer as its partner gives a binding promise in a separate

⁷⁹ Any supervisory decision to suggest a lower risk weight than that suggested by the simple RW method should be subject to a robust supervisory review of the factors, including infrastructure and capacity of the IIFS to monitor the performance and operations of the financed entity, quality of collateral used, nature of business activities to be undertaken, legal and regulatory environment, adequacy of financial control and reporting system of the customer and the IIFS, information-sharing procedures, valuation methods and exit strategies. In appropriate cases, the supervisory slotting method provides a more risk-sensitive means of assigning a risk weight.

document to buy out the IIFS's share by making payments on specified future dates in accordance with a separate contract of sale entered at that time. Diminishing *mushārah* may relate to a specific fixed asset/real estate leased to the customer under an *ijārah* contract or to the general working capital of the customer's business venture.

216. The IIFS's position in a diminishing *mushārah* thus entails two kinds of exposures.

- a. The amounts due from the partner to buy out the agreed shares of the investment on the agreed dates are subject to credit risk in respect of the partner's ability and willingness to pay.⁸⁰ The IIFS's selling price for each share of ownership being transferred is based either on the fair value of that share at the date of the partial transfer of ownership (which exposes the IIFS to capital gains or losses and hence to capital impairment risk) or at a price agreed upon at the time of entering into the contract. The IIFS's credit risk exposure in respect of the *mushārah* investment will be calculated based on the remaining balance of the amount invested (measured at historical cost, including any share of undistributed profits) less any specific provision for impairment. If there is a third-party guarantee to make good impairment losses, the risk weight of the guarantor shall be substituted for that of the outstanding balance of the *mushārah* investment for the amount of any such guarantee.
- b. As a joint-owner, the IIFS is entitled to its share of income generated from its share of the underlying assets of the *mushārah*, such as *ijārah* lease rentals (e.g. when a home purchase plan is provided by an IIFS on the basis of diminishing *mushārah*). The rental payable by the partner/customer as *ijārah* lessee is adjusted periodically to reflect the IIFS's remaining ownership share in the asset. The IIFS is exposed to credit risk in respect of non-payment of the rentals receivable from the partner/customer.

217. Based on the above, when a diminishing *mushārah* contract is related to a specific fixed asset/real estate leased to a customer under an *ijārah* contract, the IIFS's credit exposure will be similar to an exposure under a *mushārah* with an *ijārah* subcontract. In this case, the *mushārah* investment shall be assigned a risk weight based on the credit standing of the counterparty/lessee, as rated by an ECAI that is approved by the supervisory authority, and 100% RW on residual value of an asset. In case the counterparty is unrated, a risk weight of 100% shall apply.

⁸⁰ Diminishing *mushārah* contracts typically contain a clause whereby, in the event of a default by the partner in making a due payment, the IIFS has the right to terminate the contract and to exercise a put option requiring the partner to buy out the whole of the IIFS's remaining share of the investment. However, a financially distressed partner will most likely be unable to do so.

218. However, if the exposure under the diminishing *mushārah* contract consists of working capital finance in the customer's business venture, the IIFS shall measure its credit risk similarly to an equity exposure held in the banking book, as set out in section 4.1.3.9.1. However, this treatment will be subject to the consideration of any third-party guarantee to make good impairment losses. In that case, the risk weight of the guarantor shall be substituted for that of the outstanding balance of the *mushārah* investment for the amount of any such guarantee. Moreover, subject to obtaining prior approval from its supervisory authority, an IIFS can use the supervisory slotting method, based on the criteria set out in Appendix E (diminishing *mushārah*).

4.1.3.9.3 Equity investments in a company or an Islamic collective investment scheme not held for short-term resale or trading purposes

219. Such a holding is not a trading book exposure, and thus the "look-through" principle, whereby the risk weight of the exposure would be that of the underlying assets, does not apply and the exposure is that of an equity position in the banking book. Banking book investments would not normally include investments in common shares or Islamic collective investment schemes that are publicly listed. However, if such an investment is in an entity or Islamic collective investment scheme (consisting predominantly of equity instruments/stocks) that is publicly listed on a recognised securities exchange, the holding being not for short-term resale or trading purposes, a 250% RW shall be applied, consistent with the simple risk weight method. Likewise, a 250% RW shall be applied to all other equity holdings. The exposure in such investments shall be measured at the carrying values of the investments, according to the international financial reporting standards, or according to those in force in the relevant jurisdiction where different (such as historical cost less any provisions for impairment).

4.1.3.9.4 A specified project

220. An IIFS can advance funds to a construction company which acts as *muḍārib* in a construction contract for a third-party customer (ultimate customer). The ultimate customer will make progress payments to the *muḍārib*, who in turn makes payments to the IIFS. The essential role of the IIFS in this structure is to provide bridging finance to the *muḍārib* pending its receipt of the progress payments. In this *muḍārah* structure, the IIFS as investor advances funds as *rabb-al-māl* to the construction company as *muḍārib* for the construction project, and is thus entitled to a share of the profit of the project but must bear 100% of any loss. In most cases, the IIFS has no direct or contractual relationship with the ultimate

customer, but in such a structure the IIFS stipulates that payments by the ultimate customer to the *muḍārib* be made to an account (“repayment account”) with the IIFS which has been opened for the purpose of the *muḍārabah* and from which the *muḍārib* may not make withdrawals without the IIFS’s permission.

221. In such a case, the IIFS is exposed to the default risk on the amounts advanced to the *muḍārib* under the *muḍārabah* contract, but this risk would be mitigated by the amounts received from the ultimate customer into the "repayment account" which are effectively collateralised. Thus, while under the *muḍārabah* contract the credit risk on amounts advanced by the IIFS to the *muḍārib* would normally be treated as "equity positions in the banking book" which warrant/deserve a 250% RW. However, the use of the structure involving a “repayment account”, whereby the ultimate customer makes payments into such an account with the IIFS instead of making payments directly to the *muḍārib*, has the effect of substituting the credit risk of the ultimate customer for that of the *muḍārib* to the extent of the collateralised balance of the "repayment account".

222. In addition to credit risk (i.e. in the absence of a repayment account, the risk that the *muḍārib* has received payment from the ultimate customer but fails to pay the IIFS, or, if the repayment account is used, that the ultimate customer fails to pay), the IIFS is exposed to capital impairment in the event that the project results in a loss. The proposed risk weight and impact of credit risk mitigation are explained in [section 4.1.5](#).

4.1.3.9.5 *Mushārahah with ijārah or murābahah subcontract*

223. An IIFS can establish joint ownership of tangible fixed assets (such as cars, machinery, etc.) with a customer on a *mushārahah* basis, the assets being leased or sold on an *ijārah* or a *murābahah* basis, respectively. In these cases, the "look-through" principle (whereby the risk weight is that of the underlying contract) applies, as explained below.

224. In the case of *ijārah*, ownership of such assets can produce rental income for the partnership, through leasing the assets to third parties by means of *ijārah* contracts. In this case, the risk of the *mushārahah* investment is that of the underlying *ijārah* contracts – that is, credit risk mitigated by the "quasi-collateral"⁸¹ represented by the leased assets. In the event the asset is leased to the IIFS’s partner as a customer instead of to a third party, the credit risk will relate to the partner’s obligation to pay the lease rentals. This *mushārahah*

⁸¹ Strictly speaking, *ijārah* assets do not provide collateral to the lessor, as the latter owns the assets, but can repossess them in the event of default by the lessee. This provides what may be called "quasi-collateral", a term that is used in this and other IFSB standards.

investment shall be assigned a risk weight based on the credit standing of the counterparty/lessee, as rated by a supervisor-approved ECAI, and a 100% RW on the residual value of the *ijārah* asset. In the event the counterparty is unrated, a risk weight of 100% shall apply.

225. In the case of *murābahah*, the IIFS is entitled to its share of income (mark-up) generated from selling the assets to third parties. The IIFS as a capital contributor is exposed to credit risk in respect of the *murābahah* receivables from the buyer/counterparty. This *mushārahah* investment shall be assigned a risk weight based on the credit standing of the counterparty/buyer, as rated by a supervisor-approved ECAI. In the event the counterparty is unrated, a risk weight of 100% shall apply.

4.1.3.10 *Defaulted exposures*

226. For risk-weighting purposes under the standardised approach, a defaulted exposure is defined as an exposure that is past due for more than 90 days or is a financing exposure to a defaulted counterparty. A defaulted counterparty is a counterparty in respect of whom any of the following events have occurred:

- a. Any material financing obligation is past due for more than 90 days.
- b. A write-off or account-specific provision is made as a result of a significant perceived decline in credit quality subsequent to the IIFS taking on any financing exposure to the recipients of financing.
- c. A distressed restructuring of any financing obligation (i.e. a restructuring that may result in a diminished financial obligation caused by the material forgiveness, or postponement, of financing exposure) is agreed by the IIFS.
- d. The counterparty's bankruptcy or a similar order in respect of any of the counterparty's financing obligations to the IIFS has been filed.
- e. The counterparty has sought, or has been placed in, bankruptcy or similar protection where this would avoid or delay repayment of any of the financing obligations to the IIFS.
- f. Any other situation has occurred where the IIFS considers that the counterparty is unlikely to settle the exposure in full without recourse by the IIFS to actions such as realising security.

227. For retail exposures, the definition of default can be applied at the level of a particular financing obligation, rather than at the level of the counterparty. As such, default by a

counterparty on one obligation does not require an IIFS to treat all other obligations to it as defaulted.

228. The defaulted exposures should be risk-weighted net of specific provisions and partial write-offs as contained in Table 14.

Table 14 Defaulted Exposures		
Type	Risk Weight	Percentage of Specific Provision for Defaulted Exposures
Unsecured exposure (other than unsecured portion of receivable partly secured by RRE) that is past due more than 90 days, net of specific provisions	150%	Less than 20% of the outstanding receivables.
Unsecured exposure (other than unsecured portion of receivable partly secured by RRE) that is past due more than 90 days, net of specific provisions	100%	At least equal to or greater than 20% of the outstanding receivable, but RSAs have discretion to reduce the risk weight to 50% when specific provisions are no less than 50% of the outstanding receivables.
Exposure fully secured by eligible collateral	100%	At least 15% of the outstanding receivables. RSAs should set strict operational criteria to ensure the quality of collateral.
Exposure secured by RRE	100%	For receivables that are outstanding for more than 90 days, net of specific provisions. RSAs have the discretion to reduce the risk weight to 50% if specific provisions are at least 20% of the outstanding receivables.

4.1.3.11 *Other assets*

229. The standard risk weight for all other assets will be 100%, with the exception of exposures to: (i) cash owned and held at the IIFS or in transit; and (ii) gold bullion held at the

IIFS or held in another bank on an allocated basis, to the extent the gold bullion assets are backed by gold bullion liabilities. A risk weight of 0% will apply to these assets. Also, a 20% RW will apply to cash items in the process of collection.

4.1.4 Implementation Considerations in Jurisdictions that Allow Use of External Ratings for Regulatory Purposes

4.1.4.1 Recognition of ratings by ECAI

230. The IFSB has published its guidance note GN-1 (*Guidance Note on Recognition of Ratings by ECAs on Sharī'ah-Compliant Financial Instruments*) which outlines the criteria to be considered by RSAs while approving ECAs as eligible to issue ratings permitted to be used for complying with regulatory capital rules. IIFS should be mandated to use ratings issued only by such eligible ECAs for calculating capital requirements under the standardised approach set out under this Standard.

231. IFSB GN-1 asserts that rating analysis of Sharī'ah-compliant assets may differ from analysis of conventional assets, both in terms of the general principles that govern Sharī'ah-compliant finance (e.g. the concept of default) and of the features of specific financial instruments (e.g. the concept of DCR when dealing with returns on investment accounts that are based on a *muḍārabah* contract). It notes that the principal areas where Sharī'ah-compliant finance may differ from conventional finance include, inter alia: (a) different meanings of ratings and the concept of default; (b) priority of claims; (c) corporate governance and the role of the Sharī'ah board; (d) risk mitigation techniques to cater for DCR; (e) definition of capital; (f) trading in *sukūk*, which in most jurisdictions does not involve trading in debt (unlike conventional bonds); (g) asset valuations; and (h) loss-given default.

232. In addition to the guidance provided by IFSB GN-1, the following criteria should be considered by RSAs for recognition of eligible ECAs in relation to Sharī'ah-compliant instruments and financial institutions.

- a. *Objectivity*: An ECAI should have a rigorous and systematic methodology for assessing credit exposure of the IIFS, with appropriate validation procedures. Such assessments should reflect related developments that can impact the underlying risk exposure and should be subject to review as and when necessary. The assessment methodology should have been established for more than one year, before being recognised by RSAs.
- b. *Independence*: An ECAI should be independent and ensure that it is not influenced

by any political, economic or regulatory considerations while performing the rating assignments. It must also avoid conflicts of interest with the board of directors, shareholders, senior management and other employees of the rated institution.

- c. *International access/transparency*: Apart from private assessments, an ECAI should make publicly available its procedures, methodologies, key assumptions and important elements used in the assessment process. It should publish its ratings in an accessible form.⁸² In addition to the loss and cash-flow analysis, it should make publicly available the sensitivity of its ratings to changes in related assumptions.
- d. *Disclosure*: An ECAI should disclose the information related to: (i) its code of conduct; (ii) assessment methodologies; (iii) definition of default; (iv) priority of claims; (v) meaning of each rating; (vi) actual default rates experienced in each assessment category; (vii) transition trends; (viii) approach to incorporate DCR in assessment methodology; and (ix) considerations for Sharī'ah compliance. It should also disclose, where appropriate, the difference in methodology for assessing similar types of instruments and exposure in conventional financial institutions – for example, points of differentiation between ratings of conventional and Islamic securitisation, asset-based and asset-backed *sukūk*, etc.
- e. *Resources*: An ECAI should demonstrate that they have sufficient resources to conduct high-quality analysis, both when assigning ratings for the first time and when maintaining ratings after they have been assigned. It should demonstrate that its analysts have expertise that is relevant to the sectors covered by the agency. It should establish that it has the financial resources to remain in business over the time horizon of its ratings.
- f. *Credibility*: Meeting the above criteria will help an ECAI to achieve credibility among the users of its ratings, including, inter alia, the investors, customers, RSAs, financial institutions and the media. An ECAI should have internal procedures that preclude the misuse of confidential information by its analysts and other staff. However, it is not essential for an ECAI to assess institutions in more than one jurisdiction to establish their credibility and be eligible for recognition by the supervisory authority.
- g. *No abuse of unsolicited ratings*: ECAs must not use unsolicited ratings to put pressure on entities to obtain solicited ratings. RSAs should consider whether to continue recognising such ECAs as eligible for capital adequacy purposes, if such behaviour

⁸² This means that ratings that are made available only to the parties to a transaction do not meet the "transparency" requirements outlined in this Standard.

is identified.

- h. *Cooperation with the national supervisor:* ECAs should notify the supervisor of significant changes to methodologies and provide access to external ratings and other relevant data in order to support initial and continued determination of eligibility.

233. RSAs shall be responsible for recognising and determining on a continuous basis whether an ECAI meets the criteria for recognition spelt out in IFSB GN-1 as well as those considerations outlined in paragraph 232. The assessments of ECAs may be recognised on a limited basis – for example, by type of claims or by jurisdiction. The supervisory process for recognising ECAs should be transparent, with requisite information about it being publicly available.

234. RSAs will be responsible for assigning eligible ECAs' ratings to the risk weights available under the standardised risk weighting framework – that is, deciding which rating categories correspond to which risk weights. The mapping process should be objective and should result in a risk weight assignment consistent with that of the level of credit risk reflected in the tables above. It should cover the full spectrum of risk weights.

235. When conducting such a mapping process, factors that RSAs should assess include, among others, the size and scope of the pool of issuers that each ECAI covers, the range and meaning of the ratings that it assigns, and the definition of default used by the ECAI.

236. IIFS must use the chosen ECAs and their ratings consistently for all types of claim where they have been recognised by their supervisor as an eligible ECAI, for both risk-weighting and risk management purposes. IIFS will not be allowed to “cherry-pick” the ratings provided by different ECAs and to arbitrarily change the use of ECAs.

237. IIFS should use the ratings provided by the selected ECAI on a consistent basis for the purpose of their risk management and capital adequacy (i.e. risk-weighting) calculations. IIFS shall not use the ratings provided by different ECAs on an arbitrary basis, and any use of ratings from more than one ECAI must receive the approval of the applicable supervisory authority.

238. Normally, IIFS should use the ratings provided by the chosen ECAs at the request of the rated institution (i.e. solicited ratings). RSAs may allow, at their discretion, the use of an unsolicited rating from another ECAI, provided they are satisfied that the unsolicited rating is just as robust and reliable as the solicited rating and also satisfied the condition discussed in paragraph 232. For guidance on ECAI ratings related to securitisation exposures of IIFS, see

section 6.8. External ratings for one entity within a corporate group cannot be used to risk-weight other entities within the same group.

4.1.4.2 Multiple external ratings

239. An IFS shall disclose the names of the ECAI that it has used for the purpose of assigning risk weights to its assets. If there is only one rating by an ECAI chosen by an IIFS for a particular claim, that rating should be used to determine the risk weight of the exposure. If there are two assessments by ECAI chosen by an IIFS which map into different risk weights, the higher risk weight will be applied. If there are three or more ratings with different risk weights, the two ratings that correspond to the lowest risk weights should be referred to. If these give rise to the same risk weight, that risk weight should be applied. If different, the higher risk weight should be applied. (See section 4.1.4.1 for more on ECAIs.)

4.1.4.3 Determination of whether an exposure is rated: Issue-specific and issuer ratings

240. Where an IIFS invests in a particular issue that has an issue-specific rating, the risk weight of the exposure will be based on this rating. Where the IIFS's exposure is not an investment in a specific rated issue, the following general principles apply.

- a. In circumstances where the counterparty has a specific rating for a *sukuk* – but the IIFS's exposure is not an investment in this particular *sukuk* – a high-quality credit rating (one which maps into a risk weight lower than that which applies to an unrated claim) on that specific *sukuk* may only be applied to the IIFS's unrated exposure if this claim ranks in all respects *pari passu* or senior to the claim with a rating. If not, the external rating cannot be used and the unassessed claim will receive the risk weight for unrated exposures.
- b. In circumstances where the counterparty has an issuer rating, this rating typically applies to a particular exposure or issue. Consequently, only the holders of that particular issue or claims on that issuer will benefit from a high-quality issuer rating.
- c. In circumstances where the issuer has a specific high-quality rating (one which maps into a lower risk weight) that only applies to a limited class of liabilities (such as a deposit assessment or a counterparty risk assessment), this may only be used in respect of exposures that fall within that class.

241. Whether the IIFS intends to rely on an issuer- or an issue-specific rating, the rating must take into account and reflect the entire amount of credit risk exposure the IIFS has with regard to all payments owed to it.

242. In order to avoid any double-counting of credit enhancement factors, no supervisory recognition of credit risk mitigation techniques will be taken into account if the credit enhancement is already reflected in the issue-specific rating (see paragraph 240).

4.1.4.4 Domestic currency and foreign currency ratings

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

4.1.4.5 Short-term/long-term ratings

244. For risk-weighting purposes, short-term ratings are deemed to be issue-specific. They can only be used to derive risk weights for exposures arising from the rated exposure. They cannot be generalised to other short-term exposures, except under the conditions of paragraph 246. In no event can a short-term rating be used to support a risk weight for an unrated long-term exposure. Short-term ratings may only be used for short-term exposures against IIFS/banks and corporates. Table 15 provides a framework for banks' exposures to specific short-term financing, such as commodity *murabahah* transaction, interbank placement, etc.

External rating	A-1/P-1 ⁸³	A-2/P-2	A-3/P-3	Others ⁸⁴
Risk weight	20%	50%	100%	150%

245. If a short-term rated financing exposure attracts a 50% RW, unrated short-term financing exposures cannot attract a risk weight lower than 100%. If an issuer has a short-term financing exposure with an external rating that warrants a risk weight of 150%, all unrated financing exposures, whether long-term or short-term, should also receive a 150%

⁸³ The notations follow the methodology used by Standard & Poor's and by Moody's Investors Service. The A-1 rating of Standard & Poor's includes both A-1+ and A-1-.

⁸⁴ This category includes all non-prime and B or C ratings.

risk weight, unless the IIFS uses recognised credit risk mitigation techniques for such exposures.

246. In cases where short-term ratings are available, the following interaction with the general preferential treatment for short-term exposures to banks as described in paragraph 153 (on preferential treatment) will apply:

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

247. When a short-term rating is to be used, the institution making the assessment needs to meet all of the eligibility criteria for recognising ECAIs, as described in paragraph 232, in terms of its short-term ratings.

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

4.1.5 Credit Risk Mitigation Techniques

249. IIFS may use a number of techniques to mitigate the credit risks to which they are exposed. For example, exposures may be collateralised by first-priority claims, in whole or in part with cash or securities; or may be guaranteed by a third party; or may be offset by use of Sharī'ah-compliant hedging instruments. Additionally IIFS may agree to offset financing exposure against deposits or PSIA funds from the same counterparty.

250. The exposure in respect of a debtor, counterparty or other obligor can be further adjusted or reduced by considering the credit risk mitigation techniques employed by the IIFS. The CRM techniques set out in this section are applicable to banking book exposures

that are risk-weighted under the standardised approach. The section outlines the approach and criteria, methodologies and specific requirements for using these techniques.

251. IIFS should note that no exposure in which CRM techniques are used shall receive a higher capital requirement than an otherwise identical exposure where such techniques are not used. The requirements of IFSB-22⁸⁵ must be fulfilled for IIFS to obtain capital relief in respect of any CRM techniques.

252. The effects of CRM must never be allowed to be double counted. In order to avoid double counting, CRM will not be recognised for capital adequacy purposes in the event where the rating assessment of particular Islamic securities has taken into consideration the effect of the CRM, as credit enhancement factors. For example, if an external rating for a specific issue has taken into account the effects of a guarantee attached to the issuance, this guarantee shall not be eligible for the purposes of CRM. IIFS should also take into account any residual risks arising out of use of CRM techniques, such as market, operational, legal and liquidity risks. Therefore, IIFS must employ robust procedures and processes to control these risks, including: strategy; consideration of the underlying credit; valuation; policies and procedures; systems; and management of concentration risk arising from the bank's use of CRM techniques and its interaction with the IIFS's overall credit risk profile. Where these risks are not adequately controlled, RSAs may impose additional capital charges or take other supervisory actions as outlined in IFSB-16.

253. The collateral used as a part of CRM must be compliant with Sharī'ah requirements. The collateralisation⁸⁶ shall be properly documented in a security agreement or in the body of a contract to the extent permissible by Sharī'ah, and must be binding on all parties and legally enforceable in the relevant jurisdictions. The IIFS should ensure that the CRM documentation is legally enforceable and should carry out periodic reviews to confirm its enforceability at all times. The IIFS cannot recognise a commitment to provide collateral or a guarantee as an eligible CRM unless such a commitment is actually executed.

254. In order for CRM techniques to provide protection, there should not be any material positive correlation between the value of collateral and the credit quality of a counterparty.

⁸⁵ IFSB-22: *Revised Standard on Disclosures to Promote Transparency and Market Discipline for Institutions offering Islamic Financial Services*.

⁸⁶ Generally, in IIFS such collateralisation takes place under the concept of "*rahn*" or "*kafālah*".

For example, securities issued by a counterparty or by any of its related entities would be ineligible for collateral as they would not provide the credit protection in times of need.

255. For a collateralised transaction – such as Sharī'ah-compliant alternatives to repo/reverse repo of *sukūk* and Islamic securities – capital requirements shall be applicable on either side of the transaction.

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

257. The CRM techniques that are commonly employed by the IIFS are as follows:

a. Hamish Jiddiyah (security deposit held as collateral)

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

259. In the case of a non-binding PP/PL, the HJ is refundable in full to the client, and hence is not considered as an eligible CRM.

b. Urbūn (earnest money held after a contract is established as collateral to guarantee contract performance)

260. The *urbūn* taken from a purchaser or lessee when a contract is established accrues to the benefit of the IIFS if the purchaser or lessee fails to execute the contract within the agreed term.

c. Guarantee from a third party (recourse or non-recourse guarantee)

261. The guarantor may or may not have recourse to the obligor (i.e. purchaser or lessee) and the guarantee can be for a fixed period and for a limited amount, without any consideration being received by the guarantor. However, a claim should first be made against

the obligor, and then against the guarantor, unless an option is provided to make the claim against either the obligor or the guarantor.

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

263. The supervisory authority may give capital relief for the use of a guarantee that meets the following conditions:

- a. the guarantee represents the IIFS's direct claim on the guarantor;
- b. the guarantee is irrevocable and does not allow the guarantor to cancel unilaterally the guarantee after the creation of the receivables;
- c. the guarantee is unconditional and provides no protection clause that prevents the guarantor from being obliged to pay out in a timely manner in the event that the original counterparty fails to make payments due;
- d. it is explicitly referenced to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and incontrovertible;
- e. the IIFS has the right to pursue, in a timely manner, the guarantor for monies outstanding, rather than having to pursue the original counterparty to recover its exposure;
- f. the guarantee shall be an explicitly documented obligation assumed by the guarantor;
and
- g. the guarantee shall cover all types of expected payments made under the contract in the event that the original counterparty defaults.
- h. On the qualifying default/non-payment of the counterparty, the IIFS may in a timely manner pursue the guarantor for any monies outstanding under the documentation governing the transaction. The guarantor may make one lump sum payment of all monies under such documentation to the IIFS, or may assume the future payment obligations of the counterparty covered by the guarantee. The IIFS must have the right to receive any such payments from the guarantor without first having to take legal action in order to pursue the counterparty for payment.

264. It is permitted to have a range of guarantors to cover the exposure. Guarantees issued by parties with a lower risk weight than the counterparty will result in a reduction of the capital

charge because the credit exposure covered by the guarantee is assigned the risk weight of the guarantor. The risk weight applicable to the uncovered portion will remain that of the underlying counterparty.

d. Pledge of assets as collateral

265. The pledged asset must be a Sharī'ah-compliant asset of monetary value that can be lawfully owned, and is saleable, specifiable, deliverable and free of encumbrance. The pledge must be legally enforceable. The asset pledged may either be the underlying asset or any other asset owned by the customer. The pledge of an asset owned by a third party is subject to the owner's consent to the pledge.

266. The pledger can authorise the IIFS, as the pledgee, to sell the asset and to offset the amount due against the sales proceeds without recourse to the courts. Alternatively, the IIFS can demand the sale of the pledged asset in order to recover the amount due. Any surplus from the sale proceeds is to be returned to the pledger, and any shortfall shall be treated as an unsecured exposure that ranks *pari passu* with other unsecured creditors when the debtor is declared insolvent.

267. In case an IIFS takes collateral of an asset pledged more than once, the collateral of the IIFS shall be ranked either *pari passu* to the collaterals of other earlier pledgees with their consent, or junior to the earlier pledgees, in which case the IIFS's claim shall be limited to the residual value of the pledged asset after payment is made to earlier pledgees. The IIFS shall take the residual value after deducting a haircut under the simple approach or the comprehensive approach (the standard supervisory haircuts or the internal haircuts) to offset its credit exposure but should first ascertain the recoverable value of the asset after taking into consideration the IIFS's position as a pledgee as to whether it ranks *pari passu* with the other pledgee(s) or ranks junior to a pledgee that is registered earlier than the IIFS.

268. RSAs should come up with specific recognition criteria (that suits their national peculiarities) for physical collateral used for credit risk mitigation purposes.

e. Leased assets

269. Assets leased under *ijārah* or IMB contracts fulfil a function similar to that of collateral, in that they may be repossessed by the lessor in the event of default by the lessee (hence the term "quasi-collateral" used in this and other IFSB standards).

f. On-balance sheet netting

270. Subject to Sharī'ah approval, netting arrangements between financing assets and deposits/PSIA should be legally enforceable in order to be used as an eligible CRM technique. The net exposure will be used for capital adequacy purposes if the IIFS has a legally enforceable arrangement for netting or offsetting the financing assets and the deposits/PSIA, irrespective of whether the counterparty is insolvent or bankrupt. The IIFS should have a robust system of monitoring those financing assets and deposits/PSIA with the counterparty that is subject to the netting arrangements. In using the net exposure for the calculation of capital adequacy, financing assets shall be treated as exposures and deposits/PSIA as collateral in the comprehensive approach (as per the formula provided below). A zero haircut will be applicable, except in the case of a currency mismatch.

4.1.5.1 Types of collateral

271. The following types of collateral are eligible for relief in respect of the above CRM techniques:

- a. *Hamish jiddiyah* (security deposit) only for agreements to purchase or lease preceded by a binding promise.
- b. *Urbūn*.
- c. Unrestricted PSIA or cash on deposit⁸⁷ with the IIFS which is incurring the exposure.
- d. *Sukūk* rated by an external rating agency which are issued by:
 - i. sovereigns and PSEs (treated as sovereigns) with a minimum rating of BB–; or
 - ii. issuers other than the above, with a minimum rating of BBB– (for long-term) or A–3/P–3 (for short-term).
- e. *Sukūk* that are unrated by an ECAI but fulfil each of the following criteria:
 - i. issued by an IIFS or a conventional bank (with Islamic windows or subsidiary operations) or a sovereign;
 - ii. listed on a recognised exchange;
 - iii. the IIFS which incurs the exposure or is holding the collateral has no information to suggest that the issue would justify a rating below BBB– or A–3/P–3;
 - iv. the RSAs are sufficiently confident about the market liquidity of the securities; and
 - v. all rated issues by the issuing IIFS must be rated at least BBB– or A–3/P–3 by a recognised ECAI.

⁸⁷ Must be supported by an agreement or documentation that gives the IIFS the right of set-off against the amount of receivables due from the customer.

- f. Sharī`ah-compliant equities and units in Islamic collective investment schemes.
- g. Guarantees issued by third parties that fall within the following categories:
 - i. sovereigns and central banks;
 - ii. PSEs;
 - iii. MDBs;
 - iv. international organisations/official entities with a 0% RW;
 - v. IIFS or conventional banks (with Islamic windows or subsidiary operations); and
 - vi. corporate entities (including *takāful*- and Sharī`ah-compliant securities firms) of a minimum rating of A–. This category includes guarantees issued by parent, subsidiary and affiliate companies when their risk weight is lower than the ultimate obligor.
- h. Assets pledged as collateral, as stated in [section 4.1.5\(d\)](#), or fulfilling the function of collateral, as stated in [section 4.1.5\(e\)](#).

272. Any portion of the exposure which is not collateralised shall be assigned the risk weight of the counterparty.

4.1.5.2 Risk mitigation approaches

273. Capital relief against the collateral can be granted based on either the simple or the comprehensive approach, as described below. However, IIFS are permitted to use either, but not both, of the approaches in reducing their risk exposures in the banking book. IIFS can use partial collateralisation in both approaches. Maturity mismatches between exposure and collateral will only be allowed under the comprehensive approach.

4.1.5.2.1 Simple approach

274. The simple approach allows the substitution of the risk weight of the collateral for the risk weight of the counterparty for the collateralised portion of the exposure, subject to the collateral being pledged for at least the life of the exposure and being marked to market and revalued with a minimum frequency of six months. Those portions of exposures collateralised by the market value of recognised collateral receive the risk weight applicable to the collateral instrument. The uncollateralised portion of the exposure will be assigned the risk weight of the recipient of financing. The risk weight of the collateralised portion shall not be lower than 20%, except under the conditions specified below in which case the collateral will be assigned a 0% risk weight.

- a. Both the exposure and the collateral are cash or a sovereign security or PSE security

qualifying for a 0% risk weight under the standardised approach.

- b. Both the exposure and the collateral are denominated in the same currency.
- c. Either the transaction is overnight, or both the exposure and the collateral are marked to market daily and are subject to daily remargining.
- d. Sovereign/PSE securities are eligible for a 0% RW, with their market value discounted by 20%.

275. At the discretion of the RSAs, IIFS may apply a risk weight of 0% to a transaction if the counterparty to the transaction is a core market participant. Core market participants may include: sovereigns, central banks and PSEs; IIFS and securities firms; other financial companies (including *takaful* companies) eligible for a 20% risk weight under the standardised approach; regulated mutual funds that are subject to capital or leverage requirements; regulated pension funds; and qualifying central counterparties (QCCPs).

276. Sharī'ah-compliant hedging instruments which are normally traded OTC can be given a risk weight of 0% provided the following conditions are met. In case these conditions are not fulfilled, see section 4.1.3 for calculating the credit equivalent using the standardised approach.

- a. The OTC Sharī'ah-compliant hedging instruments are subject to daily mark-to-market.
- b. There is no currency mismatch.
- c. The collateral is cash. In case the collateral is not cash, but consists of *sukūk* issued by sovereigns/PSEs that qualify for a 0% RW in the standardised approach, a minimum risk weight of 10% shall be applicable.

4.1.5.2.2 *Comprehensive approach*

277. In the comprehensive approach, the exposure to a counterparty shall be adjusted based on the collateral used. The IIFS shall adjust *both* the amount of the exposure to the counterparty *and* the value of the collateral, using *haircuts* in order to reflect variations in the value of both the exposure and the collateral due to market movements. The resultant volatility-adjusted amount of exposure and collateral will be used for the calculation of capital requirements for the underlying risk exposure. In most cases, the adjusted exposure will be higher than the unadjusted exposure, and adjusted collateral will be lower than the unadjusted collateral, unless either of them is cash. An additional downward adjustment for

collateral shall be made if the underlying currencies of exposure and collateral are not the same, so as to take account of foreign exchange fluctuations in the future.

278. Risk-weighted assets shall be determined by calculating the difference between the volatility-adjusted exposure and the volatility-adjusted collateral and multiplying this adjusted exposure by the risk weight of the counterparty.⁸⁸

279. The formula for calculating the adjusted exposure after incorporating risk mitigation using the comprehensive approach will be as follows:

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

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 collateral received

H_c = haircut appropriate to the collateral

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

280. If more than one asset is involved in a collateralised transaction, the haircut on the basket (H) will be a weighted sum of applicable haircuts to each asset (H_i), with asset weights (a_i) measured by units of currency – that is, $H = \sum a_i H_i$.

281. In the case of maturity mismatches, the value of the collateral received (collateral amount) must be adjusted in accordance with section 4.1.5.3. The value of exposure and collateral adjusted for maturity mismatch should then be used to account for risk mitigation. The exposure amount after risk mitigation must be multiplied by the risk weight of the counterparty to obtain the risk-weighted asset amount for the collateralised transaction.

282. For calculating haircuts, either of the two following methods may be used by IIFS: (a) standard supervisory haircuts; and (b) internal haircuts. The parameters for standard supervisory haircuts and features of qualitative and quantitative criteria for using internal haircuts are provided in the following paragraphs.

a. Standard supervisory haircuts

⁸⁸ This calculation will be carried out when the volatility-adjusted exposure amount is greater than the volatility-adjusted collateral amount, including any additional adjustment for foreign exchange risk.

283. Both the amount of exposure to a counterparty and the value of collateral received are adjusted by using standard supervisory haircuts. In jurisdictions that allow the use of external ratings for regulatory purposes (assuming daily mark-to-market, daily remargining and a 10-business day holding period), haircuts expressed as percentages (Hc) and (He), must be used to determine the adjusted value of the collateral and the exposure.

Table 16 Supervisory Haircuts for Comprehensive Approach			
<i>Jurisdictions that allow the use of external ratings for regulatory purposes</i>			
Types of Collateral*	Residual Maturity (yrs)	Haircuts	
		Sovereigns⁸⁹	Others
Cash	All	0	0
<i>Sukūk</i>	≤1	0.5	1
Long-term: AAA to AA– and	>1 to ≤5	2	4
Short-term: A–1	>5	4	8
<i>Sukūk</i>	≤1	1	2
Long-term: A+ to BBB– and	>1 to ≤5	3	6
Short-term: A–2 to A–3	>5	6	12
<i>Sukūk</i>	All	15	25
Long-term: BB+ to BB–			
<i>Sukūk</i> (unrated)	All	25	25
Equities (listed and included in main index)	All	15	15
Equities (listed but not included in main index)	All	25	25

⁸⁹ Includes PSEs and MDBs.

Units in Islamic collective investment schemes	All	Depending on the underlying assets as above	Depending on the underlying assets as above
Physical assets pledged in accordance with section 4.1.5(d)	All	≥ 30	≥ 30

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

284. In jurisdictions that do not allow the use of external ratings for regulatory purposes, the following supervisory haircuts (assuming daily mark-to-market, daily remargining and a 10-business day holding period), expressed as percentages, must be used to determine the haircuts appropriate to the collateral (Hc) and to the exposure (He):

Table 17 Supervisory haircuts for comprehensive approach

Jurisdictions that do not allow the use of external ratings for regulatory purposes

	Residual Maturity	Issuer's Risk Weight (Only for <i>sukuk</i> Issued by Sovereigns) ⁹⁰			Other Investment-Grade Securities, Consistent with Paragraph 148(d)(iii) ⁹¹	
		0%	20% or 50%	100%	Non-securitisation exposures	Senior securitisation exposures with RW < 100%
Sukuk	≤ 1 year	0.5	1	15	2	4
	>1 year, ≤ 3 years	2	3	15	4	12
	>3 years, ≤ 5 years				6	
	>5 years, ≤ 10 years	4	6	15	12	24
	> 10 years				20	
Main index equities (including convertible <i>sukuk</i>) and gold	20					
Other equities and convertible <i>sukuk</i> listed on a recognised exchange	30					
Units in Islamic collective investment schemes	Depending on the underlying assets					

Cash in the same currency	0
Other exposure types	30

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

b. Internal haircuts

286. Subject to obtaining the approval from its supervisory authority, an IIFS may use its own estimate of haircuts to measure market price and foreign exchange volatilities. Such approval will normally require the fulfilling of certain qualitative and quantitative⁹² criteria set by the supervisory authority, inter alia:

- a. integration of risk measures into daily risk management;
- b. validation of any significant change in the risk management process;
- c. verification of consistency, timeliness and reliability of data; and
- d. accuracy and appropriateness of volatility assumptions.

4.1.5.3 Maturity mismatch

287. For the purpose of calculating risk-weighted assets, a maturity mismatch occurs when the residual maturity of the CRM is less than that of the underlying credit exposure. In the case of a maturity mismatch with the CRM having a maturity of less than one year, the CRM will not be recognised. This means that a CRM with a maturity mismatch will only be permitted where its maturity is at least one year. Only the comprehensive approach shall be used for CRM with maturity mismatches. In addition, a CRM having a residual maturity of three months or less, with a maturity mismatch, will not be recognised for capital adequacy purposes.

⁹⁰ Includes: PSEs that are treated as sovereigns by the national supervisor, as well as MDBs receiving a 0% RW.

⁹¹ Includes PSEs that are not treated as sovereigns by the national supervisor.

⁹² For quantitative criteria, a 99th percentile, one-tailed confidence interval should be used, with a minimum one-year historical observation period. The minimum holding period will be dependent on the type of transaction and the frequency of marking to market. The holding period should also consider the illiquidity of the lower-quality assets. The haircuts must be computed at least every three months. In case of higher price volatility, supervisory authorities may require a shorter observation period.

1. The following adjustment will be applied for a CRM with a maturity mismatch:

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

where:

P_a = value of credit risk mitigation adjusted for maturity mismatch

P = value of risk mitigation used (e.g. collateral or guarantee amount)

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

t = min (T, residual maturity of the risk mitigation) in years

288. The maturity of both the underlying exposure and the CRM must be defined conservatively. The effective maturity of the underlying exposure must be gauged as the longest possible remaining time before the counterparty is scheduled to fulfil its obligation, taking account of any applicable grace period. For the CRM, any contract that may reduce its term must be taken into account so that the shortest possible effective maturity is used.

4.1.5.4 Credit risk mitigation for *muḍārabah* classified as equity exposures

289. A placement of funds made under a *muḍārabah* contract may be subject to a Sharī'ah-compliant guarantee from a third party. Such a guarantee relates only to the *muḍārabah* capital, not to the return. In such cases, the capital should be treated as subject to credit risk with a risk weighting equal to that of the guarantor provided that the risk weight of that guarantor is lower than the RW of the *muḍārib* as a counterparty. Otherwise, the risk weight of the *muḍārib* shall apply; that is, a RW for "equity exposure in banking book" shall apply, as per section 4.1.3.9.

290. In a *muḍārabah* investment in project finance, collateralisation of the progress payments made by the ultimate customers (e.g. by means of a "repayment account" – see section 4.1.3.9.4) can be used to mitigate the exposure to unsatisfactory performance by the *muḍārib*.

291. An IIFS may also place liquid funds with a central bank or another IIFS on a short-term *muḍārabah* basis in order to obtain a return on those funds. Such placements serve as an interbank market transaction, with maturities ranging from overnight up to three months, but the funds may be withdrawn on demand before the maturity date, in which case the return is calculated proportionately on the basis of duration and amount. Although, from a juristic point of view, the amounts so placed do not constitute debts, since (in the absence of

misconduct or negligence) *muḍārabah* capital does not constitute a liability for the institution that acts as *muḍārib*, in practice the operation of this interbank market requires that the *muḍārib* should effectively treat them as liabilities. Hence, an IIFS placing funds on this basis may treat them as cash equivalents and, for risk-weighting purposes, apply the risk weight applicable to the *muḍārib* as counterparty.

4.1.5.5 Treatment of an exposure covered by multiple CRM techniques

292. If an exposure is covered by multiple CRM techniques (e.g. an exposure partially covered by both collateral and a guarantee), the IIFS shall segregate the exposure into segments covered by each type of CRM technique. The calculation of risk-weighted assets will be made separately for each segment. Similarly, if a single CRM has differing maturities, they should also be segregated into separate segments.

4.2 Market Risk

4.2.1 Introduction

293. Market risk is defined as the risk of losses in on- and off-balance sheet positions arising from movements in market prices. The risk positions or assets carried by IIFS that are subject to the market risk capital requirements include, but are not limited to:

- a. profit rate risk and equity risk pertaining to financial instruments in the trading book;
- b. default risk in the trading book instruments;
- c. foreign exchange risk and commodities risk in the trading and banking books; and
- d. inventory risk arising from an IIFS's business activities.

294. In calculating its capital charges for market risk, an IIFS should use the simplified alternative to the standardised approach, set out in the final revision to minimum capital market risk standards as contained in the Minimum Capital Requirement for Market Risk, published in January 2019, simply called the simplified standardised approach (SSA). The SSA is a recalibrated version of the Basel II standardised approach for calculating the market risk capital requirement. In this approach, the capital charge is determined on the basis of the Basel II standardised approach, and then multiplied by scaling factors for all the different four risk classes.

295. RSAs may, at their discretion, allow the IIFS in their jurisdiction to apply the sensitivities-based method (SBM) as set out in the latest Basel standard for market risk, published in January 2019, to calculate market risk capital charges for their trading book exposures. In such cases, the RSAs should follow the SBM completely and should not be allowed to selectively implement specific components of the SBM except in cases where the SBM permits them to do so. Such a decision to allow the use of SBM should be based on an objective assessment of the appropriateness of the SBM to the trading book risk profile of IIFS operating in their jurisdiction.

296. RSAs may, as an instance of national discretion, allow the use of the internal models approach as set out in the latest Basel standard for market risk, published in January 2019, to calculate market risk capital charges for the market risk exposures of an IIFS in their jurisdiction. In such cases, the IIFS must have explicit approval from the relevant RSA, which is based on fulfilment of qualitative standards, specifications of market risk factors being captured into the IIFS's risk management system, quantitative standards, a comprehensive stress testing programme, and validation of the models by independent external experts and/or RSAs.

4.2.2 Trading Book

4.2.2.1 Scope of the trading book

297. A trading book⁹³ consists of all instruments that meet the specifications for trading book instruments set out in paragraphs 298 to 310. All other instruments must be included in the banking book.

298. Instruments comprise financial instruments, foreign exchange (FX), commodities and inventories. A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments include primary financial instruments (or cash instruments) and Shari'ah-compliant hedging instruments. A financial asset is any asset that is cash, the right to receive cash or another financial asset or a commodity, or an equity instrument. A financial liability is the contractual obligation to deliver cash or another financial asset or a commodity. Commodities and inventories also include non-tangible (i.e. non-physical) goods such as electric power.

299. IIFS may only include a financial instrument, instruments on FX, commodity or inventories in the trading book when there is no legal impediment against selling or fully hedging it.

300. IIFS must on a daily basis fair value any trading book item (or) instrument and recognise any valuation change in the profit and loss (P&L) account.

4.2.2.2 Allocation of positions/items to the regulatory books

301. Any instrument held by an IIFS for one or more of the following purposes must, at the point of time of its initial recognition on its books, be designated as a trading book instrument, unless specifically otherwise provided for under paragraph 299 or 303:

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

302. The following instruments, if held by an IIFS, must be regarded as being held for at least one of the purposes listed in paragraph 301 and must consequently be included in the

⁹³ A trading book consists of positions in financial instruments and commodities and inventories held either with trading intent or to hedge other elements of the trading book.

trading book of that IIFS, unless otherwise specifically provided for in paragraph 299 or 303:

- a. instruments that would give rise to an equity position in the banking book; or
- b. instruments resulting from underwriting commitments, where “underwriting commitments” refers only to securities underwriting, and relates only to securities that are expected to be actually purchased by the IIFS on the settlement date.

303. Any instrument which is not held for any of the purposes listed in paragraph 301 at inception, nor is regarded as being held for those purposes identified in paragraph 302, must be assigned to the banking book. Therefore, the following instruments held by an IIFS must be assigned to its banking book:

- a. unlisted equities;
- b. instruments designated for Shariah-compliant securitisation warehousing;
- c. real estate holdings, where in the context of assigning an instrument to the trading book, real estate holdings relate only to direct holdings of real estate as well as to Shari’ah-compliant hedging instruments on direct holdings;
- d. retail and SME financing;
- e. equity investments in a fund, unless the IIFS meets at least one of the following conditions:
 - i. the IIFS is able to look through the fund to its individual components and there is sufficient and frequent information, verified by an independent third party, provided to the IIFS regarding the fund’s composition; or
 - ii. the IIFS obtains daily price quotes for the fund and it has access to the information contained in the fund’s mandate or in the national regulations governing such investment funds;
- f. hedge funds; and
- g. instruments held for the purpose of hedging a particular risk of a position in the types of instruments identified above.

304. There is a general presumption that the following instruments are being held for at least one of the purposes listed in paragraph 301 and therefore are trading book instruments, unless otherwise specifically provided for in paragraph 299 or 303:

- a. instruments held as accounting trading assets or liabilities;

- b. instruments resulting from market-making activities;
- c. equity investments in a fund, excluding those assigned to the banking book in accordance with paragraph 303(e);
- d. listed equities; and
- e. trading-related, repo-style transactions.

305. IIFS are allowed to deviate from the presumptive list specified in paragraph 304 according to the process set out below.

- a. If an IIFS believes that it needs to deviate from the presumptive list established in paragraph 304 for an instrument, it must submit a request to its RSA and receive explicit ex-ante approval for such deviation. As part of such a request, the IIFS must provide evidence that the relevant instrument is not held for any of the purposes set out in paragraph 301.
- b. If the IIFS fails to secure such an approval from the RSA, it must designate the instrument as a trading book instrument. The IIFS must document any deviations from the presumptive list in detail on an ongoing basis.

4.2.2.3 Powers of the RSAs

306. Notwithstanding the process established in paragraph 305 for instruments on the presumptive list, the RSA may require the IIFS to provide evidence that an instrument in the trading book is held for at least one of the purposes listed under paragraph 301. If the RSA is of the view that an IIFS has not provided enough evidence, or if the RSA believes the instrument would normally fit into the banking book, it may require the IIFS to assign the instrument to the banking book, except if it is an instrument listed under paragraph 302.

307. The relevant RSA may require the IIFS concerned to provide evidence that an instrument in its banking book is not held for any of the purposes listed in paragraph 301. If the RSA is of the view that the IIFS has failed to provide adequate evidence, or if the RSA believes such instruments would normally belong to the trading book, the RSA may require the IIFS to assign the instrument to its trading book.

4.2.2.4 Documentation of instrument designation

308. An IIFS must have clearly defined policies, procedures and documented practices for allocation of its positions (or) accounting items to either the banking book or the trading book, for the purposes of calculating its regulatory capital requirement. These policies and procedures must be designed to ensure compliance with the criteria set forth in this section,

and must reflect the risk management capabilities and practices of the IIFS. An IIFS's internal control functions must conduct an ongoing evaluation of instruments both in and out of the trading book to assess whether they are being properly designated initially as trading or non-trading instruments in the context of its trading activities. Compliance with these policies and procedures must be subject to periodic internal audit reviews, at least on an annual basis. The results of such reviews must be fully documented and must be made available to the RSA for supervisory review.

4.2.2.5 Restrictions on moving instruments between the regulatory books

309. Apart from moves required under paragraphs 301 to 305, there must be a hard limit on the ability of the IIFS to move its instruments between its trading book and its banking book by their own discretion after initial designation, which is subject to the process in paragraphs 310 and 311. Switching instruments between the banking and trading books for regulatory arbitrage must be strictly prohibited. In practice, instances of such switching should be rare and must be allowed by the relevant RSA only in extraordinary circumstances. Examples of such extraordinary circumstances are a major publicly announced event, such as an IIFS restructuring that results in the permanent closure of trading desks, requiring termination of the business activity applicable to the instrument or portfolio or a change in accounting standards that allows an item to be fair-valued through P&L. Market events, changes in the liquidity of a financial instrument, or a change of trading intent alone are not valid reasons for reassigning an instrument to a different book. When switching positions, an IIFS must ensure that the standards described in paragraphs 301 to 305 are always strictly complied with.

310. Any beneficial impact on capital requirements arising as a result of switching between banking and trading books must not be allowed in any case or circumstance. To ensure compliance with this requirement, the IIFS undertaking a switch must determine its total capital charges (across the banking book and trading book) before and immediately after the switch, to demonstrate that the capital charges are not reduced as a result of this switch. If such determinations show a reduction in capital charge, the difference as measured must be imposed on the IIFS as a disclosed Pillar 1 capital surcharge. This surcharge will be allowed to run off as the positions mature or expire, in a manner agreed with the RSA. This additional capital charge need not be recalculated on an ongoing basis, although the positions would continue also to be subject to the ongoing capital requirements of the book into which they have been switched.

311. Any reassignment between books must be approved by senior management and the RSAs as follows. Each and every instance of reallocation of securities or positions between

the trading book and banking book, including outright sales at arm's length, should be considered a reassignment of securities, and every such reassignment must comply with the following requirements:

- a. It must be thoroughly documented and subject to internal review to ensure compliance with IIFS' policies and all attendant regulations.
- b. It must be approved by senior management.
- c. It must be subject to prior approval by the RSA based on supporting documentation provided by the IIFS.
- d. It must be publicly disclosed.
- e. Unless required by changes in the characteristics of a position, such reassignments must be irrevocable.

312. If an instrument is reclassified to be an accounting trading asset or liability, there is a presumption that this instrument is in the trading book, as described in paragraph 304. Accordingly, in this case an automatic switch without approval of the RSA is acceptable.

313. An IIFS must adopt a policy on reassignment of positions between trading and banking books, and such a policy must be updated at least on an annual basis. Such annual updates should be based on an analysis of all extraordinary events identified during the previous year and must be sent to the appropriate RSA with changes duly highlighted. A policy on reassignment of positions must include the following:

- a. the reassignment restriction requirements in paragraphs 309 to 311, especially the restriction that reassignment between the trading book and banking book may only be allowed in extraordinary circumstances, and a description of the circumstances or criteria where such a switch may be considered;
- b. the process for obtaining senior management and supervisory approval for such a transfer;
- c. how a bank identifies an extraordinary event; and
- d. a requirement that reassignments into or out of the trading book be publicly disclosed at the earliest reporting date.

4.2.2.6 Treatment of internal risk transfers

314. An internal risk transfer is an internal written record of a transfer of risk within the banking book, between the banking and the trading book, or within the trading book (between different desks).

315. Regulatory capital recognition for internal risk transfers from the trading book to the banking book is not allowed. Thus, if a bank engages in an internal risk transfer from the trading book to the banking book (e.g. for economic reasons), it would not be taken into account when the regulatory capital requirements are determined.

316. Internal risk transfers from the banking book to the trading book must comply with the provisions set out in paragraphs 317 to 323.

4.2.2.7 Internal risk transfer of credit and equity risk from banking book to trading book

317. When an IIFS hedges a banking book credit risk exposure or equity risk exposure using a hedging instrument purchased through its trading book (i.e using an internal risk transfer),

- a. The credit exposure in the banking book is deemed to be hedged for capital requirement purposes if, and only if:
 - i. the trading book enters into an external hedge with an eligible third-party protection provider that exactly matches the internal risk transfer; and
 - ii. the external hedge meets the requirements as set out in CRE22.86 to CRE22.89 of the Consolidated Basel Framework.
- b. The equity exposure in the banking book is deemed to be hedged for capital requirement purposes if, and only if:
 - i. the trading book enters into an external hedge from an eligible third-party protection provider that exactly matches the internal risk transfer; and
 - ii. the external hedge is recognised as a hedge of a banking book equity exposure.
- c. External hedges for the purposes of paragraph 317(1) can be made up of multiple transactions with multiple counterparties as long as the aggregate external hedge exactly matches the internal risk transfer, and the internal risk transfer exactly matches the aggregate external hedge.

318. Where the requirements in paragraph 317 are satisfied, the banking book exposure is deemed to be hedged by the banking book leg of the internal risk transfer for capital purposes in the banking book. Moreover, both the trading book leg of the internal risk transfer and the external hedge must be included in the market risk capital requirements.

319. Where the requirements set out in paragraph 317 are not satisfied, the banking book

exposure is not deemed to be hedged by the banking book leg of the internal risk transfer for capital purposes in the banking book. Moreover, the third-party external hedge must be fully included in the market risk capital requirements, and the trading book leg of the internal risk transfer must be fully excluded from the market risk capital requirements.

320. A banking book short credit position or a banking book short equity position created by an internal risk transfer and not capitalised under the banking book rules must be capitalised under the market risk rules together with the trading book exposure.

4.2.2.8 Internal risk transfer of general profit rate risk from banking book to trading book

321. When an IIFS hedges a banking book profit rate risk exposure using an internal risk transfer with its trading book, the trading book leg of the internal risk transfer is treated as a trading book instrument under the market risk framework if, and only if:

- a. the internal risk transfer is documented with respect to the banking book profit rate risk being hedged and the sources of such risk;
- b. the internal risk transfer is conducted with a dedicated internal risk transfer trading desk which has been specifically approved by the supervisor for this purpose; and
- c. the internal risk transfer must be subject to trading book capital requirements under the market risk framework on a stand-alone basis for the dedicated internal risk transfer desk, separate from any other general profit rate risk (GPRR) or other market risks generated by activities in the trading book.

322. Where the requirements set out in paragraph 321 are fulfilled, the banking book leg of the internal risk transfer must be included in the banking book's measure of profit rate risk exposures for regulatory capital purposes.

323. An internal risk transfer desk approved by the RSA for this purpose may include instruments purchased from the market (i.e. external parties to the IIFS). Such transactions may be executed directly between the internal risk transfer desk and the market. Alternatively, the internal risk transfer desk may obtain the external hedge from the market via a separate non-internal risk transfer trading desk acting as an agent, if and only if the GPRR internal risk transfer entered into with the non-internal risk transfer trading desk exactly matches the external hedge from the market. In this latter case the respective legs of the GPRR internal risk transfer are included in the internal risk transfer desk and the non-internal risk transfer desk.

4.2.2.9 Internal risk transfers within the scope of application of the market risk capital requirement

324. Internal risk transfers between trading desks within the scope of application of the market risk capital requirements (including FX risk and commodities risk in the banking book) will generally receive regulatory capital recognition. Internal risk transfers between the internal risk transfer desk and other trading desks will only receive regulatory capital recognition if the constraints set out in paragraphs 321 to 323 are met. The trading book leg of internal risk transfers must fulfil the same requirements under this section as instruments in the trading book transacted with external counterparties.

4.2.3 Calculation of Market Risk Capital Requirements

325. All transactions forming part of the trading book or leading to creation of trading book positions must be included in the calculation of market risk capital requirements as of the trade date for such transactions. Although prudential supervisory reporting usually takes place only at periodic intervals (quarterly, in most jurisdictions), IIFS must be required to manage their market risk and meet their market risk capital charges, at all times, on a continuous basis. In particular, the IIFS must be capable of demonstrating compliance with this requirement at the close of each business day and must have internal controls to ensure that the IIFS meets its market risk capital charges at close of business every day.

326. RSAs must have at their disposal a number of effective measures to ensure that IIFS do not window-dress by showing significantly lower market risk positions on reporting dates. IIFS must also be expected to maintain strict risk management systems to ensure that intraday exposures are not excessive.

327. A matched currency risk position will protect an IIFS against loss from movements in exchange rates, but will not necessarily protect its capital adequacy ratio. If the IIFS has its capital denominated in its domestic currency and has a portfolio of foreign currency assets and liabilities that is completely matched, its capital/asset ratio will fall if the domestic currency depreciates. By running a short risk position in the domestic currency, the IIFS can protect its capital adequacy ratio, although the risk position would lead to a loss if the domestic currency were to appreciate. RSAs are free to allow IIFS to protect their capital adequacy ratio in this way and exclude certain currency risk positions from the calculation of net open currency risk positions, subject to meeting each of the following conditions:

- a. The risk position is taken or maintained for the purpose of hedging partially or totally against the potential that changes in exchange rates could have an adverse effect on its capital ratio.

- b. The risk position is of a structural (i.e. non-dealing) nature, such as positions stemming from:
 - i. investments in affiliated, but not consolidated, entities denominated in foreign currencies; or
 - ii. investments in consolidated subsidiaries or branches denominated in foreign currencies.
- c. The exclusion is limited to the amount of the risk position that neutralises the sensitivity of the capital ratio to movements in exchange rates.
- d. The exclusion from the calculation is made for at least six months.
- e. The establishment of a structural FX position and any changes in its position must comply with the risk management policy of the IIFS for structural FX positions. This policy must have the ex-ante approval of the national RSA.
- f. Any exclusion of the risk position needs to be applied consistently, with the exclusionary treatment of the hedge remaining in place for the life of the assets or other items.
- g. The IIFS must be required to document the positions and amounts to be excluded from market risk capital requirements and make such data available for supervisory review.

328. Positions related to items that are deducted from an IIFS's capital base must not be subject to any FX risk capital requirement. Holdings of capital instruments that are deducted from an IIFS' capital base or risk-weighted at 1250% are not allowed to be included in the market risk framework. This includes:

- a. holdings of the IIFS' own eligible regulatory capital instruments;
- b. holdings of eligible regulatory capital instruments issued by other IIFS, other banks, securities firms and other financial services entities, as well as intangible assets, which are required by regulations to be deducted from the capital base of the IIFS;
or
- c. holdings for which a dealer exception has been established by the relevant RSA, in cases where an IIFS demonstrates that it is an active market-maker for regulatory capital instruments issued by other IIFS, other banks, securities firms and other financial services entities. In order to qualify for the dealer exception, the IIFS must have adequate systems and controls surrounding the trading of such eligible

regulatory capital instruments.

329. In the same way as for credit risk and operational risk, the capital requirements for market risk apply on a global consolidated basis. Notwithstanding this, the RSAs may demand that the individual risk positions be taken into the measurement system without any offsetting or netting against risk positions in the remainder of the group. This may be needed, for example, where there are obstacles to the quick repatriation of profits from a foreign subsidiary or where there are legal and procedural difficulties in carrying out the timely management of risks on a consolidated basis.

330. Moreover, RSAs must retain the right to continue to monitor the market risks of individual entities on a non-consolidated basis to ensure that significant imbalances within a group do not escape supervision. RSAs must be especially vigilant in ensuring that IIFS under their oversight do not conceal risk positions on reporting dates in such a way as to escape measurement.

4.2.4 Simplified Standardised Approach

331. Under the SSA, the market risk capital requirement (MCR) for an IIFS is the arithmetic sum of the recalibrated capital requirements arising from each of the four risk classes – profit rate risk, equity position risk in the trading book, foreign exchange risk, and commodity and inventory risk as detailed in the formula below, where:

- a. CR_{EQ} = capital requirement under paragraphs 339 to 342 on equity risk, plus additional requirements for option risks from equity instruments (non-delta risks) on treatment of options for equity trading position;
- b. CR_{BR} = capital requirement under paragraphs 343 to 359 on benchmark rate risk, plus additional requirements for option risks from *sukuk* instruments (non-delta risks) on the treatment of options;
- c. CR_{FX} = capital requirement under paragraphs 360 to 369 on FX risk, plus additional requirements for option risks from foreign exchange instruments (non-delta risks) on treatment of options for FX position;
- d. $CR_{C\&I}$ = capital requirement under paragraphs 370 to 379 on commodities and inventory risk, plus additional requirements for option risks from commodities instruments (non-delta risks) on treatment of options for commodities and inventory position;
- e. SF_{BR} = scaling factor of 1.30;
- f. SF_{EQ} = scaling factor of 3.50;

g. $SF_{C\&I}$ = scaling factor of 1.90; and

h. SF_{FX} = scaling factor of 1.20.

$$\mathbf{MCR = CR_{BR} * SF_{BR} + CR_{EQ} * SF_{EQ} + CR_{FX} * SF_{FX} + CR_{C\&I} * SF_{C\&I}}$$

332. The market risk capital requirement calculations for an equity position or a *sukūk* position in the trading book should be applied to all the trading book positions of an IIFS based on the guidance provided in the paragraphs below. For the foreign exchange, commodities and inventories positions, market risk capital requirement calculations should be applied to the trading book positions at the IIFS level.

4.2.5 *Guidance on Valuation Practices*

333. IIFS should have adequate systems and controls for carrying out the valuation of positions in the trading book. In view of the less liquid positions of many *sukūk* and equity positions held by IIFS, adhering to prudent valuation practices as set out in this subsection is of vital importance. Less liquid positions, however, are not to be excluded from the trading book solely on the basis of lesser liquidity.

334. IIFS should have robust systems and controls, with documented policies and procedures for the valuation process. These systems should be integrated with the IIFS's enterprise risk management processes and should have the ability to give confidence to the supervisory authorities and management regarding the reliability of the valuations. These policies and procedures should include: (a) clearly defined responsibilities of the personnel and departments involved in the valuation; (b) sources of market information, and review of their reliability; (c) frequency of independent valuations; (d) timing of closing prices; (e) procedures for adjusting valuations between periods; (f) ad-hoc verification procedures; and (g) reporting lines for the valuation department that should be independent of the front office. Such policies and procedures should also take into consideration compliance with the relevant accounting standards and supervisory requirements.

335. IIFS may use either of the two following valuation methodologies in order of preference: (a) mark-to-market; and (b) mark-to-model, subject to the approval of the supervisory authority. Mark-to-market valuation requires daily valuation of positions based on independently sourced current market prices.

336. In the case where an IIFS is unable to mark-to-market its positions as a result of certain limitations on the reliability of price estimates owing to low volume and number of transactions or in distressed market conditions, it can use mark-to-model for the valuation of its trading positions provided it is established that the market for an asset is inactive or that a transaction

on which a valuation might have been based is a distressed transaction, so that no reliable fair value estimate is possible. In order to verify that the market for an asset is inactive, an IIFS should establish that there is a lack of recent transactions with sufficient frequency and volume, which could otherwise provide ongoing price information related to the assets to be valued (which may be *sukūk* and/or other Sharī`ah-compliant instruments). The IIFS should also verify that price quotations available in the market are not up to date and have large variations over time. The prices should demonstrate a significant premium related to liquidity risk underlying the instruments. The IIFS should also confirm that the bid–ask spread has become abnormally wide or has been fluctuating over time, and that quoted prices available in the market are not related to any stressed market conditions.

337. After the verification of the aforementioned points, an IIFS may use the mark-to-model technique for estimating the value of assets. Mark-to-market valuation methodology is benchmarked, extrapolated or otherwise calculated from a market input. Such calculations should be performed while taking a conservative approach. Senior management should be aware of trading book exposures that are calculated using mark-to-model and should understand the impact of using this technique on reporting the risk and performance of the IIFS. To the extent possible, any market inputs used should reflect market prices. For particular products, generally accepted valuation methodologies should be used. Internally developed models should be subject to verification and testing of assumptions, calculation methods and software implementation by independent parties.⁹⁴ Those responsible for risk management should be aware of any weaknesses of the models used. The models should be reviewed periodically in order to verify the accuracy of their performance. To cover the uncertainties of mark-to-model valuation, valuation adjustments should be made as appropriate. IIFS should also have an arrangement for independent verification of market prices or model inputs for accuracy. Such verification should be made at least monthly. When pricing sources are few or limited, valuation adjustments or other appropriate measures may be used by IIFS.

4.2.6 *Measuring Market Risk*

338. As mentioned above, market risk calculation includes: (a) equity position risk in the trading book; (b) benchmark risk on trading positions in *sukūk*; (c) foreign exchange risk; and (d) commodities and inventory risk. The calculation methodology for these risks is provided below. The total market risk capital charge, summed arithmetically, will be the overall

⁹⁴ Useful guidance on "mark-to-model" and associated valuation issues may be obtained from the International Accounting Standards Board's "Fair Value Hierarchy", as set out in International Financial Reporting Standard 13: *Fair Value Measurement*, paragraphs 72–90.

measure of the market risks from the aforementioned sources.

4.2.6.1 Equity position risk

339. This section provides a minimum capital requirement for the risk of holding or taking positions in equities in the trading book. It applies to long positions in all instruments that exhibit market behaviour similar to equities, but not to non-convertible *sukuk* holdings of IIFS, which are covered under the section on profit rate risk. The instruments covered include common stocks (whether voting or non-voting), convertible securities that behave like equities.

340. The market risk capital charge for equity securities (including common shares and investments in Islamic collective investment schemes) in an IIFS's trading book comprises two components that are calculated separately: (i) the specific risk of holding a long position in an individual equity: and (ii) the general market risk of holding a long position in the market as a whole. These are specified below:

4.2.6.1.1 Specific risk

341. Specific risk, in the context of equity position risk, is defined as the risk of loss to an IIFS arising from specific long equity positions it holds in its trading book. The capital requirement for specific risk is 8% on equity positions, which must be calculated on a security-to-security basis.

4.2.6.1.2 General market risk

342. General market risk is defined as the sum of all the long positions in a specific equity market. The long position in the market must be calculated on a market-by-market basis; that is, a separate calculation has to be carried out for each national market in which the bank holds equities. The capital charge for general market risk is 8% on all long equity positions.

4.2.6.2 Profit rate risk in trading positions in *sukūk*

343. In the case of benchmark risk in trading positions in *sukūk*,⁹⁵ the capital charge comprises two components that are calculated separately, including one applying to the "specific risk" of each security, and the other to the benchmark rate risk in the portfolio (termed "general risk"), as specified below.

⁹⁵ For the purpose of this section, the term "*sukūk*" includes various forms of Sharī'ah-compliant securities/certificates issued by the government. *Sukūk* or Sharī'ah-compliant securities/certificates issued by local and regional governments may be subject to a zero risk weight, depending on national discretion.

4.2.6.2.1 Specific risk

344. The capital charge for specific risk covers against an adverse movement in the price of a *sukūk* held for trading due to factors related to an individual issuer. In measuring the risk of this component, offsetting is restricted only to matched positions in the identical issues. Offsetting of positions must not be allowed between different issues of the same issuer, since differences in features of *sukūk* with respect to profit rates, liquidity and call features, etc. would imply that prices may diverge in the short run.

The capital charge for specific risk will depend on the risk weight of the issue and the term to maturity of the *sukūk*, as contained in Table 17.

Categories*		Capital Charge
Government	AAA to AA–	0%
	A+ to BBB–	0.25% (residual term to final maturity <= 6 months)
		1.00% (residual term to final maturity >6 and <= 24 months)
		1.60% (residual term to final maturity >24 months)
		8%
	Below B–	12%
Unrated	8%	
Investment grade ⁹⁶		0.25% (residual term to final maturity <= 6 months)
		1% (residual term to final maturity >6 and <= 24 months)
		1.60% (residual term to final maturity >24 months)
	BB+ to BB–	8%
	Below B–	12%
	Unrated	8%

*The RSA has the discretion to apply a different specific risk weight to *sukūk* issued by certain foreign governments/issuers.

345. The government category referred in Table 18 must include all forms of sovereign/government paper, including *sukūk*, Shari'ah-compliant fixed-income instruments. RSAs reserve the right to apply a specific risk capital requirement to securities issued by certain foreign governments, especially to securities denominated in a currency other than that of the issuing government.

346. In cases where the government paper is denominated in the domestic currency and funded by the IIFS in the same currency, RSAs have the discretion to apply a lower specific

⁹⁶ Rated Baa– or higher by Moody's and BBB– or higher by Standard & Poor's.

risk capital requirement. The qualifying category includes securities issued by public-sector entities and multilateral development banks, plus other securities that are:

- a. rated investment grade (IG) by at least two credit rating agencies specified by the national authority; or
- b. rated IG by one rating agency and not less than IG by any other rating agency specified by the national RSA (subject to supervisory oversight); or
- c. subject to supervisory approval, unrated, but deemed to be of comparable investment quality by the reporting IIFS, *and* the issuer has securities listed on a recognised stock exchange.

347. The RSA in each market will be responsible for monitoring the application of these qualifying criteria, particularly in relation to the last criterion where the initial classification is essentially left to the reporting IIFS. RSAs will also have discretion to include within the qualifying category debt securities issued by IIFS in countries which have implemented this framework, subject to the express understanding that RSAs are in a position to undertake prompt remedial action if an IIFS fails to meet the capital standards set forth in this framework. Similarly, RSAs will have discretion to include within the qualifying category debt securities issued by securities firms that are subject to equivalent rules.

348. In addition, the qualifying category shall include securities issued by institutions that are deemed to be equivalent to IG quality and subject to supervisory and regulatory arrangements comparable to those under this framework. Unrated securities may be included in the qualifying category when they are subject to supervisory approval of their RSA, deemed to be of comparable investment quality by the reporting IIFS, and the issuer has securities listed on a recognised stock exchange.

4.2.6.2.2 *General market risk*⁹⁷

349. The methodology to determine capital requirement for general market risk is designed to capture the risk of loss arising from changes in the market benchmark rate. For the purpose of calculating capital requirement for general market risk, IIFS are permitted to use either the “maturity” method or the “duration” method, which are set out in the following paragraphs.⁹⁸ In each of these two methods, the capital requirement is the sum of three components:

- a. the net short or long position in the whole trading book;

⁹⁷ The capital charge for “general market risk” captures the risk of loss arising from changes in benchmark profit rates.

⁹⁸ IIFS must elect and use the method on a continuous basis (unless a change in method is approved by the RSA) and will be subject to supervisory monitoring of the systems used.

- b. a small proportion of the matched positions in each time band (the “vertical disallowance”); and
- c. a larger proportion of the matched positions across different time bands (the “horizontal disallowance”).

350. Separate maturity ladders should be used for each currency, and capital requirements should be calculated for each currency separately and then summed with no offsetting between positions of the opposite sign. In the case of those currencies in which business is insignificant, separate maturity ladders for each currency are not required. The IIFS may construct a single maturity ladder covering all currencies in which it has insignificant exposures and within each appropriate time band of that maturity ladder, slot the net long or short position for each of those insignificant currencies. However, these individual net positions are to be summed within each time band, irrespective of whether they are long or short positions, to produce a gross position figure.

351. In the maturity method, long or short positions in debt securities and other sources of benchmark rate risk exposures are slotted into a maturity ladder comprising 13 time bands (or 15 time bands in the case of low-coupon instruments). Fixed-rate instruments should be allocated according to the residual term to maturity, and floating-rate instruments according to the residual term to the next repricing date. Opposite positions of the same amount in the same issues (but not different issues by the same issuer), whether actual or notional, can be omitted from the benchmark rate maturity framework.

4.2.6.2.2.1 Maturity method

352. The capital charge for general market risk will depend on the residual term to maturity or to the next repricing date, using a simplified form of the maturity method on the net positions in each time band in accordance with Table 18.

Residual Term to Maturity	Risk Weight
1 month or less	0.00%
1–3 months	0.20%
3–6 months	0.40%
6–12 months	0.70%
1–2 years	1.25%
2–3 years	1.75%
3–4 years	2.25%
4–5 years	2.75%
5–7 years	3.25%
7–10 years	3.75%
10–15 years	4.50%

15–20 years	5.25%
>20 years	6.00%

353. The first step in the calculation is to weight the positions in each time band by a factor designed to reflect the price sensitivity of those positions to assumed changes in benchmark rates. The weights for each time band are set out in Table 19.

354. The next step in the calculation is to calculate a single position for each band. Since each band would include different instruments and different maturities, a 10% capital requirement to reflect basis risk and gap risk will be levied on the smaller of the offsetting positions, be it long or short. The result of these calculations is to produce two sets of weighted positions, the net long or short positions in each time band and the vertical disallowances, which have no sign.

355. In addition, IIFS will be allowed to conduct two rounds of horizontal offsetting:

- a. first between the net positions in each of three zones, where zone 1 is set as zero to one year, zone 2 is set as one year to four years, and zone 3 is set as four years and over (however, for coupons less than 3%, zone 2 is set as one year to 3.6 years, and zone 3 is set as 3.6 years and over); and
- b. subsequently between the net positions in the three different zones.

356. The offsetting will be subject to a scale of disallowances expressed as a fraction of the matched positions, as set out in Table 21. The weighted long and short positions in each of three zones may be offset, subject to the matched portion attracting a disallowance factor that is part of the capital requirement. The residual net position in each zone may be carried over and offset against opposite positions in other zones, subject to a second set of disallowance factors.

4.2.6.2.2.2 *Duration method*

357. At the supervisor's discretion, IIFS with the necessary capability may use the more accurate "duration" method. This method calculates the price sensitivity of each position of *sukūk* held separately. This method should be used consistently by an IIFS, unless a change is approved by the supervisory authority. The steps involved in the calculation using this method are as follows:

- a. Calculate the price sensitivity of each *sukūk* position (called "weighted positions") in terms of a change in profit rates between 0.6 and 1 percentage points depending on

the maturity of the *sukūk* and subject to supervisory guidance (see Table 20).

- b. Slot the resulting sensitivity measures into a duration-based ladder with 13 time bands, as set out in Table 20.
- c. Subject long positions in each time band to a 5% vertical disallowance on the smaller of offsetting positions (i.e. a matched position) in each time band.
- d. From the results of the above calculations, two sets of weighted positions – the net long position in each time band – will be produced. The maturity ladder is then divided into three zones, as follows: zone 1, 0–1 year; zone 2, >1–4 years; and zone 3, >4 years. IIFS will be required to conduct two further rounds of offsetting: (i) between the net time band positions in each of the three zones; and (ii) between the net positions across the three different zones (i.e. between adjacent zones and non-adjacent zones). The residual net positions are then carried forward 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 subject to a scale of disallowances (horizontal disallowances) expressed as a fraction of matched position, subject to a second set of disallowance factors (Table 21).
- e. The general market risk capital charge will be the aggregation of three charges: net position, vertical disallowances and horizontal disallowances (Table 21).

Table 20 Duration Method: Time Bands and Assumed Changes in Yield

Zone	Time Band (Expected profit rate $\geq 3\%$)	Time Band (Expected profit rate $< 3\%$)	Assumed Change in Expected Yield (%)
Zone 1	1 month or less	1 month or less	1.00
	>1–3 months	>1–3 months	1.00
	>3–6 months	>3–6 months	1.00
	>6–12 months	>6–12 months	1.00
Zone 2	>1–2 years	>1.0–1.9 years	0.90
	>2–3 years	>1.9–2.8 years	0.80
	>3–4 years	>2.8–3.6 years	0.75

Zone 3	>4–5 years	>3.6–4.3 years	0.75
	>5–7 years	>4.3–5.7 years	0.70
	>7–10 years	>5.7–7.3 years	0.65
	>10–15 years	>7.3–9.3 years	0.60
	>15–20 years	>9.3–10.6 years	0.60
	>20 years	>10.6–12 years	0.60
		>12–20 years	0.60
		>20 years	0.60

Table 21 Duration Method: Horizontal Disallowances

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

	>15–20 years			
	>20 years			

Table 22 General Risk Capital Charge Calculation

The sum of:		
Net position	Net long weighted position	x 100%
Vertical disallowances	Matched weighted positions (i.e. the smaller of the absolute value of the short and long positions with each time band) 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 and 2	x 40%
	Matched weighted positions between Zones 2 and 3	x 40%
	Matched weighted positions between Zones 1 and 3	x 100%

358. In the case of equity investments made by means of a *mushārah* or a *muḍārah* contract where the underlying assets are commodities, the market risk provisions for commodities, as described in section 4.2.6.4, will be applicable.

4.2.6.3 Foreign exchange risk

359. The capital charge to cover the risk of holding or taking long positions in foreign currencies, and in gold and silver,⁹⁹ is calculated in two steps by measuring:

- a. the exposure in a single currency position; and
- b. the risks inherent in an IIFS's portfolio mix of long and short positions in different

⁹⁹ Gold, silver and currency fall under foreign exchange risk in accordance with the Sharī'ah rules and principles that require the exchange of currencies to be made in an equal amount and on a spot basis. On the other hand, the BCBS treats gold as an FX position, rather than as a commodity, because its volatility is more in line with foreign currencies and banks manage it in a similar manner to foreign currencies, and it treats silver as being under commodity risk.

currencies.

4.2.6.3.1 Measuring an exposure in a single currency and an open position in a unilateral binding promise to buy or sell gold and silver

360. The net open position in each currency exposure is calculated by adding the following:

- a. net spot position (total assets less total liabilities, including accrued profit in the currency in question);
- b. net position of a binding unilateral promise¹⁰⁰ by the IIFS to buy and/or sell currencies on a specified future date (that are not included in the spot position);
- c. guarantees and similar off-balance sheet instruments that are likely to be called and irrecoverable;
- d. any other items representing an exposure to risk in foreign currencies – for example, a specific provision held in the currency in question but the underlying asset is held in a different currency; and
- e. the net delta-based equivalent of the total book of foreign currency options.

361. Positions in composite currencies need to be separately reported but, for measuring IIFS' open positions, may be either treated as a currency in their own right or split into their component parts on a consistent basis. Positions in gold, subject to having been acquired in a Shari'ah-compliant manner, should be measured in the same manner as described in the maturity ladder approach for commodities risk capital requirement.

362. The net open position with a unilateral binding promise to buy or sell gold or silver should first be expressed in terms of the standard unit of measurement (i.e. ounces or grams) and then be converted at the current spot rate into the reporting or base currency.

363. Structural positions which are of a non-trading nature and are merely positions taken in order to hedge partially or totally against the adverse effect of the exchange rate on the IIFS's capital ratio may be excluded from the calculation above, subject to the supervisory authority's satisfaction that such positions are merely to protect the IIFS's capital ratio.

364. There is no capital charge for positions related to items that are deducted from the IIFS's capital, such as investments in non-consolidated subsidiaries or long-term participations denominated in foreign currencies which are reported at historical cost.

365. Profits accrued (i.e. earned but not yet received) should be included as a position.

¹⁰⁰ A binding bilateral promise in an exchange of currencies is equivalent to a forward contract, which is prohibited by Sharī ah jurists in most (but not all) countries as the delivery of one or both countervalues is deferred.

Accrued expenses should also be included. Unearned but expected future income and anticipated expenses may be excluded unless the amounts are certain and IIFS have taken the opportunity to hedge them. If IIFS have included future income/expenses, they should do so on a consistent basis, and not be permitted to select only those expected future flows that reduce their position.

4.2.6.3.2 Measuring the foreign exchange risk in a portfolio

366. An IIFS must use the shorthand method described in this paragraph to calculate the risks inherent in its mix of long and short positions in different currencies.

- a. Convert the nominal amount of the net position (net long or net short position) in each foreign currency as well as in net long gold/silver into the reporting currency using spot rates.
- b. Calculate the sum of converted net short positions and the sum of converted net long positions.
- c. Aggregate the greater amount of the sum of net short positions or net long positions calculated in (b) with the net position of gold/silver, to arrive at the overall net position.

367. The capital charge is 8% on the overall net position as calculated in paragraph 366. In particular, the capital requirement would be 8% of the higher of either the net long currency positions or the net short currency positions and of the net position in gold.

368. An IIFS with insignificant levels of business denominated in foreign currency and which does not take FX positions on a proprietary basis may, at the discretion of its RSA, be exempted from capital requirements on these positions provided that:

- a. its foreign currency business, defined as the greater of the sum of its gross long positions and the sum of its gross short positions in all foreign currencies, does not exceed 100% of total capital as set out in CAP10.1 of the Consolidated Basel Framework; and
- b. its overall net open position as defined in paragraph 366 does not exceed 2% of its total capital as set out in CAP10.1 of the Consolidated Basel Framework.

4.2.6.4 Commodities and inventory risk

369. This section sets out the minimum capital requirements for measuring the risk of holding or taking long positions in commodities, including precious metals but excluding gold, silver and currencies (which falls under foreign exchange risk as set out in section 4.2.6.3), as well

as the inventory risk which results from IIFS holding assets with a view to reselling or leasing them. A commodity is defined as a physical product which is and can be traded on a secondary market – for example, agricultural products, minerals (including oil) and precious metals. Inventory risk is defined as arising from holding items in inventory either for resale under a *murābahah* contract, or with a view to leasing under an *ijārah* contract. In the case of inventory risk, the simplified approach described in paragraph 376 should be applied.

370. Commodities risk can be measured using either the maturity ladder approach or the simplified approach for the purpose of calculating the capital charge for commodities risk. Under both approaches, each commodity position is expressed in terms of the standard unit of quantitative measurement of weight or volume (barrels, kilograms, grams, etc.).

371. For both approaches, long and short positions in each commodity may be reported on a net basis for the purposes of calculating open positions. However, positions in different commodities, as a general rule, cannot be offset in this fashion. The RSAs may at their discretion permit netting between different subcategories of the same commodity in cases where the subcategories are deliverable against each other. They can also be considered as being able to be offset if they are close substitutes against each other and a minimum correlation of 0.9 between the price movements can be clearly established over a minimum period of one year. However, an IIFS intending to use this approach for its calculation of capital requirements for commodities using correlations would have to obtain the prior approval of its RSA by satisfying the RSA on the accuracy of the method.

372. The net position in each commodity will then be converted at current spot rates into the reporting currency.

373. Positions in different groups of commodities¹⁰¹ cannot be offset except in the following instances:

- a. The subcategories of commodities are deliverable against each other.
- b. The commodities represent close substitutes for each other.
- c. A minimum correlation of 0.9 between the price movements of the commodities can be clearly established over a minimum period of one year¹⁰² to the satisfaction of the supervisory authority.

¹⁰¹ Commodities can be grouped into clans, families, subgroups and individual commodities; for example, a clan might be Energy Commodities, within which Hydro-carbons is a family, with Crude Oil being a subgroup, and West Texas Intermediate, Arabian Light and Brent being individual commodities.

¹⁰² While this Standard stops short of suggesting any maximum period for reviewing the adequacy of the data and to compute the correlation for similar types of commodity products, supervisory authorities may suggest a maximum period at their discretion. A longer period of observations allows the correction to be more stable, but it may not reflect the volatile spread between similar commodity products in a short period of time, especially during the stressed period.

374. Netting of positions for different commodities is subject to the supervisory authorities' approval. Under the maturity ladder approach, the net positions are entered into seven time bands as set out in Table 23.

	Time Band	Spread Rate
1	0–1 month	1.5%
2	1–3 months	1.5%
3	3–6 months	1.5%
4	6–12 months	1.5%
5	1–2 years	1.5%
6	2–3 years	1.5%
7	>3 years	1.5%

375. A separate maturity ladder is used for each type of commodity, while the physical stocks are allocated to the first time band. The capital charge is calculated as follows:

- a. The sum of short and long positions that are matched is multiplied by the spot price for the commodity and then by the appropriate spread rate of 1.5% for each time band.
- b. The residual or unmatched net positions from nearer time bands may be carried forward to offset exposures in a more distant time band, subject to a surcharge of 0.6% of the net position carried forward in respect of each time band that the net position is carried forward.
- c. Any net position at the end of the carrying forward and offsetting will attract a capital charge of 15%.

376. The summation of the above three capital charges represents the total capital charge for commodities risk based on the maturity ladder approach.

377. Under the simplified approach as applied to commodities, the net position, long or short, in each commodity requires a capital charge of 15% to cater for directional risk plus an additional capital charge of 3% of the gross positions – that is, long plus short positions – to

cater for basis risk. The capital charge of 15% applies to assets held by IIFS in inventory with a view to resale or lease.

378. For *istisnā* work-in-process (WIP), WIP inventory belonging to the IIFS shall attract a capital charge of 8% (equivalent to a 100% RW). In the case of the balance of unbilled WIP inventory under *istisnā* without parallel *istisnā*, in addition to the risk weight for credit risk a capital charge of 1.6% is applied (equivalent to a 20% RW) to cater for market risk exposure.

379. The funding of a commodities position that exposes the IIFS to foreign exchange exposure is also subject to a capital charge as measured under the foreign exchange risk (refer to [section 4.2.6.3](#)).

4.3 Operational Risk

380. Operational risk is defined by the BCBS as the risk of losses resulting from inadequate or failed internal processes, people and systems, or from external events, which includes, but is not limited to, legal risk, cyber-risk and Sharī'ah non-compliance risk. Operational risk excludes strategic and reputational risks.

396. Operational risk in IIFS can be broadly divided into the following categories:

- a. **General risks:** Such risks arise from the various kinds of banking operations conducted by IIFS. Such operations involve a range of activities and processes that are essential to the successful accomplishment of the business objectives of IIFS and to fulfil the needs of its customers. The peculiarities of the operating practices, documentation, and processes associated with the delivery of Islamic banking services by IIFS as well as the asset-based nature of financing products in IIFS such as *murābahah*, *salam*, *istisnā'* and *ijārah* give rise to additional forms of operational risk exposures in relation to additional operational procedures, contract drafting and execution that are specific to such products.
- b. **Sharī'ah non-compliance risk (SNCR):** This is the risk of non-compliance resulting from the failure of an IIFS's Sharī'ah governance mechanism (systems and personnel) to ensure its compliance with Sharī'ah rules and principles as determined by its Sharī'ah board or other relevant body in the related jurisdiction. SNCR can lead to non-recognition of an IIFS's income and resultant losses leading to adverse impact on the profitability and capital position of the IIFS. More importantly, SNCR arising from failure to ensure compliance with Shari'ah may result in impairment of the franchise value of the IIFS concerned and the trust it enjoys with its customers, both of which are critical success factors for any IIFS.

SNCR can take two broad forms in IIFS: (i) risks relating to potential non-compliance with Sharī'ah rules and principles in the IIFS' operations; and (ii) the risk associated with the IIFS's fiduciary responsibilities as *mudārib* towards fund providers under the *muḍārabah* form of contract, according to which, in the case of misconduct or negligence by the *mudārib*, the funds provided by the fund providers become a liability of the *mudārib*. *Sukūk* structures may also be exposed to Sharī'ah non-compliance risk which may adversely affect the marketability, and hence the value, of the *sukūk*.

- c. **Legal risks:** Legal risk includes, but is not limited to, exposures to fines, penalties or punitive damages resulting from enforcement actions as well as private settlements. Such risk can arise from either: (i) the IIFS's operations – that is, from legal risks common to all financial intermediaries; or (ii) problems of legal uncertainty in interpreting and enforcing contracts based on Sharī'ah rules and principles. Legal risks also include the risk that a *sukūk* structure in which an IIFS is originator, sponsor, manager or investor fails to perform as intended because of some legal deficiency. This section is primarily concerned with potential losses due to exposures to legal risk as originator, sponsor or manager and to a much lesser extent with exposures to legal risk as a *sukūk* investor.

- d. **Cyber-risk:** Refers to any risk of financial loss or reputational harm to IIFS due to theft of financial data, disruption of financial services, or damage to financial data or system integrity resulting from threats or vulnerabilities emanating from the connectivity of internal technology infrastructure to external networks or the internet. Cyber-risk could materialise in a variety of ways, such as:¹⁰³
 - i. deliberate and unauthorised breaches of security to gain access to information systems;
 - ii. unintentional or accidental breaches of security; and
 - iii. operational IT risks due to factors such as poor system obsolescence management.

With the more prevalent use of technology in the provision of financial services, there is a need for IIFS to strengthen their technology and cyber resilience against

¹⁰³ Northbridge Insurance 'What is cyber risk, and why should I care?', <https://www.nbins.com/blog/cyber-risk/what-is-cyber-risk-2/>

operational disruptions to maintain confidence in the financial system. The growing frequency and sophistication of cyber threats also calls for the increased vigilance and capability of IIFS to respond to emerging threats.

397. The nature, size and frequency of occurrence of different types of operational risk exposures and the impact of consequent loss events vary widely across different categories of operational risk exposures. Operational risk exposures of an IIFS are characterised by a unique distribution which includes potentially a large number of exposures with a relatively high likelihood of occurrence but low level of losses, as well as a very small number of exposures which can potentially cause a disproportionately large adverse impact on the IIFS although the likelihood of their occurrence is very low. Given this kind of unique loss distribution, operational risk exposures do not lend themselves to be addressed by holding adequate capital. Therefore, it is extremely critical for an IIFS to focus on governance, systems and controls to manage operational risk exposures to minimise the likelihood of their occurrence and mitigate their adverse impact. This is particularly applicable to those operational risk exposures which can cause disproportionately high losses although they have a very low likelihood of occurrence. In such cases, carrying adequate capital to absorb such losses would be an unviable option for almost any IIFS. Therefore, proper assessment of such losses can be adequately addressed by an IIFS under the internal capital adequacy assessment process (ICAAP) (see IFSB-16).

398. Given the importance of managing operational risk exposures of the various types discussed above, it is essential for IIFS to establish and implement sound practices for operational risk management. In order to achieve this, RSAs should issue and enforce appropriate regulations that require an IIFS to have an adequate and effective operational risk management framework. The regulations should require that such an operational risk management framework takes into account the nature, scale and complexity of the IIFS, their risk appetite and risk profile, as well as the prevailing market and macroeconomic conditions. This includes prudent policies, procedures and processes to identify, monitor, report, and control or mitigate operational risk exposures on a timely basis.¹⁰⁴

399. In addition to an adequate and effective operational risk management framework, the Consolidated Basel Framework prescribes the need for banks to hold adequate capital to absorb unexpected losses from operational risk exposures. This Standard defines the standardised approach for the purpose of calculating capital charges required to address

¹⁰⁴ See IFSB-1, IFSB-17 and the BCBS publication *Principles for the Sound Management of Operational Risk*: <https://www.bis.org/publ/bcbs195.pdf>

operational risk exposures faced by an IIFS. The standardised approach to operational risk is the only approach prescribed by the Basel Consolidated Framework. This approach replaces the existing three approaches contained in the IFSB-15, namely: (i) the basic indicator approach (BIA); (ii) the standardised approach (SA); and (iii) the alternative standardised approach (ASA).

4.3.1 The Standardised Approach

400. The SA¹⁰⁵ determines an IIFS's operational risk capital requirement based on the following components:

- a. the business indicator (BI), which is a financial-statement-based proxy for operational risk;
- b. the business indicator component (BIC), which is calculated by multiplying the BI by a set of regulatory determined marginal coefficients (α); and
- c. the internal loss multiplier (ILM), which is a scaling factor that is based on a bank's average historical losses and the BIC.

4.3.1.1 The business indicator

401. The business indicator is a financial-statement-based proxy for operational risk, which is the sum of three components: the profit, *ijārah* instalments and dividend component (PIDC); the services component (SC); and the financial component (FC).

402. The BI is defined as:

$$BI = PIDC + SC + FC$$

$$PIDC = \text{Min} \{ \text{Abs} (\text{Profit earned}^{106} - \text{expenses paid}^{107}); 2.25\% * \text{profit-earning assets}^{108} \} + \text{dividend income}^{109}$$

¹⁰⁵ The new standardised approach for operational risk determines a bank's operational risk capital requirements based on two components: (i) a measure of a bank's income; and (ii) a measure of a bank's historical losses. Conceptually, it assumes that: (i) operational risk increases at an increasing rate with a bank's income; and (ii) banks which have experienced greater operational risk losses historically are more likely to experience operational risk losses in the future.

¹⁰⁶ Profit earned from all financial and other assets (including profits earned through operating *ijārah* and *ijārah muntahia bittamlīk*).

¹⁰⁷ Expenses from all financial liabilities (including expenses from *ijārah muntahia bittamlīk* and operating *ijārah* and losses, depreciation and impairment of operating *ijārah* assets).

¹⁰⁸ Profit-earning assets are the total gross outstanding financing and advances, profit-earning non-equity instruments (including sovereign and corporate *sukūk*) and *ijārah* assets as measured at the end of each financial year.

¹⁰⁹ All amounts in the formula are calculated as the average over three years: T, T-1 and T-2.

$$SC = \text{Max [fee and commission income;}^{110} \text{ fee and commission expense}^{111}) + \text{Max [other operating income;}^{112} \text{ other operating expense}^{113}]$$

$$FC = \text{Abs (Net P\&L Trading Book}^{114}) + \text{Abs (Net P\&L Banking Book}^{115})^{116}$$

403. In addition to the definitions for each of the components of BI in the relevant footnotes, those definitions are also provided in Appendix B.

4.3.1.2 The business indicator component

404. The business indicator component is a progressive measure of income that increases with the size of the IIFS.

405. To calculate the BIC, the BI is multiplied by the relevant marginal coefficients¹¹⁷ (α_i), determined by categorising the IIFS on the basis of their BI into three buckets as defined in Table 2. The marginal coefficients increase with the size of the BI. For IIFS in the first bucket (i.e. with a BI less than or equal to €1 billion), the BIC is equal to BI x 12%. The marginal increase in the BIC resulting from a one-unit increase in the BI is 12% in bucket 1, 15% in bucket 2, and 18% in bucket 3. For example, given a BI = €35 billion, the BIC = (1 x 12%) + (30–1) x 15% + (35–30) x 18% = €5.37 billion.

Table 24 BI Ranges and Marginal Coefficients

Bucket	BI Range (in €bn)	BI Marginal Coefficients (α_i)
1	≤1	12%
2	1 < BI ≤ 30	15%
3	>30	18%

¹¹⁰ Income received from providing advice and services. Includes income received by the IIFS as an outsourcer of Islamic financial services.

¹¹¹ Expenses incurred for receiving advice and services. Includes outsourcing fees paid by the IIFS for Islamic financial services (but not outsourcing fees incurred for the supply of non-financial services, such as logistical, IT, human resources).

¹¹² Income from ordinary banking operations not included in other BI items but of a similar nature.

¹¹³ Expenses and losses from ordinary banking operations not included in other BI items but of a similar nature and from operational loss events. (Expenses from operating leases should be excluded.)

¹¹⁴ This comprises: (i) net profit/loss on trading assets and trading liabilities (Sharī'ah-compliant hedging instruments, if any, non-equity instruments, equity instruments, financing and advances, and other assets and liabilities); (ii) net profit/loss from Sharī'ah-compliant hedge accounting (if any); and (iii) net profit/loss from foreign exchange differences.

¹¹⁵ This comprises (i) net profit/loss on financial assets and liabilities measured at fair value through profit and loss; (ii) realised gains/losses on financial assets and liabilities not measured at fair value through profit and loss (financing and advances, assets available for sale, assets held to maturity, financial liabilities measured at amortised cost); (iii) net profit/loss from hedge accounting and (iv) net profit/loss from foreign exchange differences.

¹¹⁶ All terms in the formula are calculated as the average over three years: T, T-1 and T-2.

¹¹⁷ The marginal coefficients are regulatory determined constants. They are based on the BI and so increase with an IIFS's size.

4.3.1.3 The internal loss multiplier

406. The internal loss multiplier is a scaling factor that depends on an IIFS's average historical operational losses.

407. The SA requires IIFS to factor in their internal operational risk loss experience in the calculation of operational risk capital charge through the ILM. The internal loss multiplier is defined as:

$$ILM = Ln \left(\exp(1) - 1 + \left(\frac{LC}{BIC} \right)^{0.8} \right)$$

408. The loss component (LC) is equal to 15 times average annual operational risk losses incurred over the previous 10 years. The ILM is equal to 1 where the loss and business indicator components are equal. Where the LC is greater than the BIC, the ILM is greater than 1. That is, an IIFS with losses that are high relative to its BIC is required to hold higher capital due to the incorporation of internal losses into the calculation methodology. Conversely, where the LC is lower than the BIC, the ILM is less than 1. That is, a bank with losses that are low relative to its BIC is required to hold lower capital due to the incorporation of internal losses into the calculation methodology.

409. The calculation of average losses in the LC must be based on 10 years of high-quality annual loss data. The qualitative requirements for loss data collection for this purpose are outlined in paragraphs 415 to 427. As part of the transition to the SA, IIFS that do not have 10 years of high-quality loss data may use a minimum of five years of loss data to calculate the LC. IIFS that do not have five years of high-quality loss data must calculate the capital requirement based solely on the BI component. RSAs may, however, require an IIFS to calculate capital requirements using fewer than five years of losses if its ILM is greater than 1 and the RSA believes that the losses are representative of the IIFS's operational risk exposure distribution.

410. For IIFS in bucket 1 (i.e. with BI ≤ €1 billion), ILM is set at 1 and hence internal loss data do not affect the capital calculation. However, RSAs are at liberty to allow the inclusion of internal loss data into the framework for IIFS in bucket 1, subject to meeting the loss data collection requirements specified in paragraphs 415 to 427. Also, RSAs may set the value of ILM equal to 1 for all IIFS in their jurisdiction. This means that the operational risk capital

requirement in such cases would not be related to the historical operational risk loss record of the IIFS concerned and would be determined solely by its BIC. In such cases where the ILM is set to 1 by the RSA, the IIFS should be required to disclose their historical operational risk losses as per the disclosure requirements contained in IFSB-22, in the interests of facilitating comparability.

411. The operational risk capital requirement is determined by the product of the BIC and the ILM. The minimum operational risk capital (ORC) requirement is calculated by multiplying the BIC and the ILM:¹¹⁸

$$\text{ORC} = \text{BIC} \times \text{ILM}$$

4.3.1.4 *Application of the standardised approach within a group*

412. Within a group, calculation of the capital charge using the standardised approach should be considered as follows:

- i. At the consolidated level, the SA calculations should use fully consolidated BI figures, which net all the intragroup income and expenses. The calculations at a sub-consolidated level should use BI figures for the IIFS consolidated at that particular sub-level. The calculations at the subsidiary level should use the BI figures from the subsidiary.
- ii. Similar to IIFS holding companies, when BI figures for sub-consolidated or subsidiary IIFS reach bucket 2, these IIFS are required to use loss experience in the SA calculations. A sub-consolidated IIFS or a subsidiary IIFS uses only the losses it has incurred in the SA calculations (and does not include losses incurred by other parts of the IIFS holding company).
- iii. In case a subsidiary of an IIFS belonging to bucket 2 or higher does not meet the qualitative standards for the use of the loss component, this subsidiary must calculate the SA capital requirements by applying 100% of the BI component. In such cases, RSAs may require the IIFS to apply an ILM that is greater than 1.

4.3.1.5 *Minimum standards for the use of loss data under the SA*

413. IIFS with a BI greater than €1 billion are required to use loss data as a direct input into the operational risk capital calculations. The soundness of data collection and the quality and

¹¹⁸ Risk-weighted assets for operational risk are equal to 12.5 times ORC.

integrity of the data are crucial to ensuring that the capital charges calculated adequately reflect the operational loss exposure of the IIFS. The minimum loss data standards are outlined in paragraphs 415 to 427. RSAs should review the quality of loss data of an IIFS periodically, as part of their prudential risk reviews.

414. IIFS which do not meet the loss data standards are required to hold capital that is at a minimum equal to 100% of the BIC. In such cases, RSAs may require their IIFS to apply an ILM that is greater than 1. The exclusion of internal loss data due to non-compliance with the loss data standards, and the application of any resulting multipliers, must be publicly disclosed along with operational risk disclosures made under IFSB-22.

4.3.1.6 General criteria on loss data identification, collection and treatment

415. The proper identification, collection and treatment of internal loss data are essential prerequisites to capital calculation under the SA. The general criteria for use of the LC are as follows:

- a. Internally generated loss data calculations used for calculation of LC must be based on a 10-year observation period. At the point of transition into the SA by an IIFS, a five-year observation period may be tolerated on an exceptional basis, provided the IIFS does not have good-quality loss data for more than five years.
- b. The credibility and relevance of internal loss data depend to a great extent on their linkage with the IIFS's current business activities, technological processes and risk management procedures. Therefore, an IIFS must have documented procedures and processes for the identification, collection and treatment of internal loss data. Such procedures and processes must be subject to validation before the use of the loss data for calculation of LC and ORC, and to regular independent reviews by internal and/or external audit functions.
- c. For risk management purposes, and to assist in supervisory validation and/or review, an RSA may request an IIFS to map its historical internal loss data into the relevant Level 1 supervisory categories as set out in OPE25.17 of the Consolidated Basel Framework and to provide this data to the RSA. The IIFS must document criteria for allocating losses to the specified event types.
- d. An IIFS's internal loss data must be comprehensive and capture all material activities and exposures from all appropriate subsystems and geographic locations. The minimum threshold for including a loss event in the data collection and calculation of average annual losses is set at €20,000. For the purpose of

calculation of average annual losses, RSAs may, at their discretion, increase the threshold to €100,000 for banks in buckets 2 and 3 (i.e. where the BI is greater than €1 billion).

- e. Aside from information on gross loss amounts, the IIFS must collect information about the reference dates of operational risk events, including the date when the event happened or first began (“date of occurrence”), where available; the date on which the IIFS became aware of the event (“date of discovery”); and the date (or dates) when a loss event results in a loss, reserve or provision against a loss being recognised in the IIFS’s profit and loss accounts (“date of accounting”). In addition, the IIFS must collect information on recoveries of gross loss amounts as well as descriptive information about the drivers or causes of the loss event.¹¹⁹ The level of detail of any descriptive information should be commensurate with the size of the gross loss amount.
- f. Operational loss events related to credit risk and that are accounted for in credit risk RWAs should not be included in the loss data set. Operational loss events that relate to credit risk, but are not accounted for in credit risk RWAs, should be included in the loss data set.
- g. Operational risk losses related to market risk are treated as operational risk for the purposes of calculating minimum regulatory capital under this framework and will therefore be subject to the SA for operational risk.
- h. IIFS must have processes to independently review the comprehensiveness and accuracy of loss data.

4.3.1.7 Specific criteria on loss data identification, collection and treatment

4.3.1.7.1 Building of the SA loss data set

416. IIFS must develop and implement policies and procedures to address several features of loss data sets, including gross loss definition, reference date and grouped losses in order to develop a loss data set of acceptable quality from its internal loss data.

4.3.1.7.2 Gross loss, net loss and recovery definitions

417. Gross loss is a loss before recoveries of any type. Net loss is defined as the loss after taking into account the impact of recoveries. The recovery is an independent occurrence,

¹¹⁹ Tax effects (e.g. reductions in corporate income tax liability due to operational losses) are not recoveries for the purposes of the SA for operational risk.

related to the original loss event, but separate in time of occurrence, in which funds or inflows of economic benefits are received from a third party.¹²⁰

418. IIFS must be able to identify the gross loss amounts, non-*takaful* recoveries, and *takaful* recoveries for all operational loss events. IIFS should use losses net of recoveries (including *takaful* recoveries) in the loss dataset. However, recoveries can be used to reduce losses only after the IIFS receives payment. Receivables do not count as recoveries for the purpose of calculating net losses. Verification of payments received to net losses must be provided to RSAs upon request.

419. The following items must be included in the gross loss computation of the loss data set:

- a. direct charges, including impairments and settlements, to the IIFS's P&L accounts and write-downs due to the operational risk event;
- b. costs incurred as a consequence of the event, including external expenses with a direct link to the operational risk event (e.g. legal expenses directly related to the event and fees paid to advisors, attorneys or suppliers) and costs of repair or replacement, incurred to restore the position that was prevailing before the operational risk event;
- c. provisions or reserves accounted for in the P&L against the potential loss impact of an operational risk loss event;
- d. losses stemming from operational risk events with a definitive financial impact, which are temporarily booked in transitory and/or suspense accounts and are not yet reflected in the P&L ("pending losses").¹²¹ Material pending losses should be included in the loss data set within a time period commensurate with the size and age of the pending item; and
- e. negative economic impacts booked in a financial accounting period, due to operational risk events impacting the cash flows or financial statements of previous financial accounting periods ("timing losses").¹²² Material "timing losses"

¹²⁰ Examples of recoveries are payments received from *takaful* providers, repayments received from perpetrators of fraud, and recoveries of misdirected transfers.

¹²¹ For instance, in some countries, the impact of some events (e.g. legal events, damage to physical assets) may be known and clearly identifiable before these events are recognised through the establishment of a reserve. Moreover, the way this reserve is established (e.g. the date of discovery) can vary across IIFS or jurisdictions.

¹²² Timing impacts typically relate to the occurrence of operational risk events that result in the temporary distortion of an institution's financial accounts (e.g. revenue overstatement, accounting errors and mark-to-market errors). While these events do not represent a true financial impact on the institution (net impact over time is zero), if the error continues across

should be included in the loss data set when they are due to operational risk events that span more than one financial accounting period and give rise to legal risk.

420. The following items should be excluded from the gross loss computation of the loss data set:

- a. costs of general maintenance contracts on property, plant or equipment;
- b. internal or external expenditures to enhance the business after the operational risk losses: upgrades, improvements, risk assessment initiatives and enhancements; and
- c. *takaful* fees/premiums.

421. IIFS must use the date of accounting for building the loss data set. The IIFS must use a date no later than the date of accounting for including losses related to legal events in the loss data set. For legal loss events, the date of accounting is the date when a legal reserve is established for the probable estimated loss in the P&L.

422. Losses caused by a common operational risk event or by related operational risk events over time, but posted to the accounts over several years, should be allocated to the corresponding years of the loss database, in line with their accounting treatment.

4.3.1.7.3 Exclusion of losses from the loss component

423. IIFS may request the approval of their RSA to exclude certain operational loss events that are no longer relevant to its business's risk profile. The exclusion of internal loss events should be rare and supported by strong justification. In evaluating the relevance of operational loss events to the IIFS's risk profile, RSAs will consider whether the cause of the loss event could occur in other areas of the IIFS's operations. Taking settled legal exposures and divested businesses as examples, RSAs should expect the IIFS's analysis to demonstrate that there is no similar or residual legal exposure and that the excluded loss experience has no relevance to other continuing activities or products of the IIFS.

424. The total loss amount and number of exclusions must be disclosed as prescribed in IFSB-22 with appropriate narratives.

more than one financial accounting period, it may represent a material misrepresentation of the institution's financial statements.

425. A request for loss exclusions should be subject to a materiality threshold to be set by the RSAs (e.g. the excluded loss event should be greater than 5% of the IIFS's average losses). In addition, losses can only be excluded after being included in an IIFS's operational risk loss database for a minimum period (e.g. three years), to be specified by the RSAs. Losses related to divested activities need not be subject to a minimum operational risk loss database retention period.

4.3.1.7.4 Exclusions of divested activities from the BI

426. IIFS may request the approval of the RSA to exclude divested activities from the calculation of the BI. Such exclusions must be disclosed in accordance with IFSB-22.

4.3.1.7.5 Inclusion of losses and BI items related to mergers and acquisitions

427. Losses and the measurement of the BI must include losses and BI items that result from acquisitions of relevant businesses and mergers.

4.3.1.8 Disclosure

428. All IIFS with a BI greater than €1 billion, or which use internal loss data in the calculation of LC and ORC, are required to disclose their annual loss data for each of the 10 years in the ILM calculation window. This applies also to IIFS in jurisdictions that have opted to set ILM equal to 1. Loss data are required to be reported on both a gross basis and after recoveries and loss exclusions. All IIFS are required to disclose each of the BI sub-items for each of the three years of the BI component calculation window.

4.3.1.9 Sharī'ah non-compliance risk

429. In line with paragraph 396(b), the following instances provide indicative examples of Sharī'ah requirements that are to be complied with by IIFS in respect of their financing contracts. The list is neither exhaustive nor conclusive and may vary according to the views of different Sharī'ah boards:

a. Murābahah and Ijārah contracts

- i. The asset is in existence at the time of sale or lease or, in the case of *ijārah*, the lease contract should be preceded by acquisition of the usufruct of that asset, except if the asset was agreed upon based on a general specification.
- ii. The asset is in the legal and constructive possession of the IIFS when it is offered for sale or lease.

- iii. The asset is intended to be used by the buyer/lessee for activities or businesses permissible by Sharī`ah; if the asset is leased back to its owner in the first lease period, it should not lead to a contract of *inah*.
- iv. There is no late payment penalty fee or increase in price in exchange for extending or rescheduling the date of payment of accounts receivable or lease receivable, irrespective of whether the debtor is solvent or insolvent.

b. *Salam and Istisnā` contracts*

- i. Sale and purchase contracts cannot be interdependent and interconditional on each other, such as *salam* and parallel *salam*, or *istisnā`* and parallel *istisnā`*.
- ii. It is not permitted to stipulate a penalty clause in respect of delay in delivery of a commodity that is purchased under a *salam* contract; however, it is allowed under *istisnā`* or parallel *istisnā`*.
- iii. As with *salam*, an essential characteristic of an *istisnā`* contract is that the subject matter does not, and is not required to, exist physically when the parties enter into the contract.

c. *Mushārahah and muḍārabah contracts*

- i. The capital of the IIFS is to be invested in Sharī`ah-compliant investments or business activities.
- ii. A partner in *mushārahah* cannot guarantee the capital of another partner, nor may a *muḍārib* guarantee the capital of the *muḍārabah*.
- iii. The purchase price of another partner's share in a *mushārahah* with a binding promise to purchase can only be set as per the market value or as per an agreement entered into at the date of contracting. It is not permissible, however, to stipulate that the share be acquired at its nominal value based on the capital originally contributed.

4.3.1.9.1 *Operational risk features of Sharī`ah-compliant modes of financing and investment*

430. As explained in paragraph 396, operational risk in IIFS may be classified into various categories including general operational risk, Sharī`ah non-compliance risk and legal risk. Non-compliance with minimum Sharī`ah requirements for various modes of financing set out in paragraph 429 can lead to SNCR and, consequently, to operational risk losses for IIFS. In the following paragraphs, an explanation of the unique operational risks faced by IIFS in commonly used Sharī`ah-compliant modes of financing and investment is provided, in addition

to the points mentioned in earlier paragraphs. It must be emphasised that, in general, any lack of precision in contract documentation entails operational risk.

431. *Murābahah*: In addition to credit risk exposures, IIFS can face the following types of operational risk relating to *murābahah* financing:

- a. At the time of signing the *murābahah* contract, it is required that an IIFS should purchase the asset and have it in its legal or constructive possession before selling it to the customer. Therefore, the IIFS needs to ensure that the legal characteristics of the contract properly match the commercial intent of the transactions.
- b. If the *murābahah* customer acts as the agent of the IIFS for purchasing the underlying asset, title of the asset must first pass to the IIFS and not directly to the customer.

432. *Salam*: When an IIFS purchases the commodity from the customer against advanced payment, the following types of operational risks may arise:

- a. If the underlying goods are agricultural commodities, and the goods delivered are of an inferior quality to that specified in the contract, the IIFS as a buyer must either reject the goods, or accept them at the originally agreed price. In the latter case, the IIFS would have to sell the goods at a lower price than would have been obtained for those specified in the contract. (In case of a parallel *salam*, however, the buyer of the commodity from the IIFS may (but is not obliged to) agree to accept the goods at the contract price. In such a case, the IIFS does not suffer any loss of profit.)
- b. The underlying goods may be delivered early by the customer, before the agreed date. If the goods delivered meet the contract specifications, the IIFS as buyer normally has to accept the goods before the agreed delivery date. This may result in additional cost for the IIFS, such as storage, *takāful* cover, or even deterioration of the goods if they are perishable in nature, before the goods are resold.
- c. In the case of parallel *salam*, if the goods cannot be delivered to the parallel *salam* buyer – due to either late delivery by the *salam* seller (the customer) or delay by the IIFS itself – the IIFS may face legal risk, unless the parallel *salam* buyer agrees to modify the delivery date of the goods involved.

433. *Istisnā*: In the case of *istisnā* with parallel *istisnā*, the IIFS contracts to deliver a constructed or manufactured asset and enters into a contract with a subcontractor in order to get the asset constructed or manufactured. The reliance of the IIFS on the subcontractor exposes it to various operational risks. These risks need to be managed by a combination of legal indemnities or warranties, precautions, due diligence in choosing subcontractors, and

selection of suitably qualified consultants and staff to monitor the execution of the contract by the subcontractor and, ultimately, delivery by the IIFS to the customer. Some operational risks related to *istisnā* may include:

- a. In case of late delivery by the subcontractor, the IIFS may be unable to deliver the asset to the ultimate customer on the agreed date, and thus may be exposed to the risk of payment of penalties for late delivery.
- b. In case of cost overruns during the construction or manufacturing process (due to either increases in the prices of raw materials and manufacturing/production costs or delays by the subcontractor, resulting in higher costs), additional costs may have to be absorbed wholly or partly by the IIFS, in the absence of an agreement in advance with the ultimate customer. If the subcontractor fails to meet quality standards or other specifications agreed with the ultimate customer, the IIFS may face legal risk if no agreement is reached with the subcontractor and the ultimate customer, either for remedying the defects or for reducing the contract price.
- c. If the subcontractor fails to complete the asset on time, the IIFS may have to find a replacement from the market. This is likely to result in additional costs for the IIFS.

434. *Ijārah and IMB*: In an operating *ijārah* or an IMB contract, an IIFS as lessor may face the following types of operational risks during the period of lease:

- a. The ultimate utilisation of the *ijārah* asset should be Shari-ah compliant. Otherwise, the IIFS will be exposed to non-recognition of the *ijārah* income as non-permissible. Further, the IIFS will be required to repossess the asset and find a new lessee.
- b. If the lessee damages the assets in its possession, but refuses to pay for the damage, the IIFS will have to repossess the asset and take legal action to cover damages. This might involve operational and litigation costs.
- c. In the event of severe damage or destruction of the asset, without any fault of the lessee, the IIFS as lessor is required to provide an alternative asset to the customer. If the asset is not insured, the IIFS will have to bear the cost of buying the new asset. Further, if the IIFS fails to provide the lessee with an alternative asset, the customer may terminate the *ijārah* contract without paying the rental for the remaining duration of the contract.
- d. In the event of any default or misconduct by the lessee, the IIFS may face legal risk in relation to the enforcement of its contractual right to repossess the asset.

435. *Mushārah*: In a *mushārah* contract, the IIFS provides financing on the basis of profit- and loss-sharing. In such a contract, the following types of operational risk may arise:

- a. The IIFS may fail to perform adequate due diligence on the customer or the financed venture.
- b. During the period of investment, the IIFS may fail to monitor adequately the financial performance of the venture or may not be able to receive the required information from the customer.

436. *Muḍārabah*: In a *muḍārabah* contract, the IIFS provides financing on the basis of a profit-sharing and loss-bearing contract. In such a contract, the following types of operational risk may arise:

- a. In this contract, the IIFS's customer as *muḍārib* is not required to bear any losses, in the absence of any negligence or misconduct on its part.¹²³ The customer is only required to act in a fiduciary capacity as the manager of the IIFS's funds. In the absence of the IIFS's right to control the management of the enterprise as provider of funds (*rabb al-māl*), the situation gives rise to moral hazard. Information asymmetry may exist due to the failure of the customer to provide regular, adequate and reliable information about the financial performance of the venture to the IIFS.
- b. The IIFS may fail to perform adequate due diligence on the customer or the underlying venture.

¹²³ A *muḍārabah* contract is a "partnership between work and capital". Therefore, the *muḍārib*, who invests work but not capital, is exposed only to the loss of (fruitless) work.

4.4 Profit-Sharing Investment Accounts

437. This section deals with the capital requirement for assets financed by profit-sharing investment accounts (PSIA), a pool of investment funds placed with an IIFS on the basis of *muḍārabah*.

438. Based on the practices prevalent in the various jurisdictions, this section could equally be applicable to other forms of investment contracts, such as *wakālah* or *mushārah*. Where investment accounts are managed under a *wakālah* contract, the relationship between the IIFS and the investors is a simple agency one, with the IIFS earning a flat fee (plus, in some cases, a performance-related component) rather than a share of profit. Supervisory authorities should use stringent eligibility criteria for including *wakālah*- or *mushārah*-based accounts in the definition of PSIA, based on the features and specificities of PSIA mentioned in this section. Supervisory authorities should also ensure that the provisions of this section are applied to *wakālah*-¹²⁴ or *mushārah*-based accounts in cases where there is no element of actual or constructive capital guarantee or promised returns given by the IIFS to the fund providers.

4.4.1 Types and Nature of PSIA

439. PSIA (commonly referred to as “investment accounts” or “special investment accounts”) can be further categorised into:

- a. unrestricted PSIA (UPSIA); and
- b. restricted PSIA (RPSIA).

440. For UPSIA, IIFS have full discretionary power in making investment decisions, as such funds are provided by unrestricted investment account holders without specifying any restrictions as to where, how or for what purpose the funds should be invested, provided that they are Sharī'ah-compliant. More often than not, the UIAH funds are “commingled” in an asset pool in which shareholders’ and current account holders’ funds (which are guaranteed by the IIFS) are also invested. UPSIA are expected to share in the overall risks of the jointly funded investments made by the IIFS. For RPSIA, on the other hand, the usage of funds by the IIFS is either subject to pre-specified investment criteria or is as agreed upon between the restricted investment account holders (RIAH) and the IIFS at the time of contracting. The RIAH share in the returns and bear the risks of an identified class of assets or a specified type of asset portfolio. Typically, IIFS do not commingle the shareholders’ funds or other funds

¹²⁴ An IFSB survey has shown that, in certain cases, a *wakālah*-based contract is constructed such that it has an element of fixed return and/or capital guarantee, which makes it closer to a deposit account than a PSIA.

at their disposal with those of RIAH funds.

441. In the case of both unrestricted and restricted PSIA, the IIFS assumes the role of economic agent or *muḍārib* in placing such funds in income-producing assets or economic activities, and as such is entitled to a share (the *muḍārib* share) in the profits (but not losses) earned on funds managed by it on behalf of the IAH, according to a pre-agreed ratio specified in the *muḍārabah* contract. An important implication of the profit-sharing and loss-bearing nature of a *muḍārabah* contract is that UPSIA, while normally appearing on the IIFS's balance sheet, are not treated as liabilities of the IIFS. Accordingly, in the case of liquidation, UIAH have no claim as creditors over the assets of the IIFS (as do conventional depositors). Instead, they have a claim to the assets financed by their funds (together with their share of any undistributed profits, less any losses), including their proportionate share of assets financed by commingled funds.¹²⁵

4.4.2 Adjustment to the Capital Ratio Denominator

442. The capital amount of PSIA is not guaranteed by the IIFS due to the profit-sharing nature of the underlying *muḍārabah* contract (or other similar contracts as per paragraph 437). Therefore, any losses arising from investments or assets financed by PSIA are to be borne by the IAH. Nevertheless, IAH are not liable for any losses arising from the IIFS's negligence, misconduct, fraud or breach of its investment mandate, which is characterised as a fiduciary risk and considered part of the IIFS's operational risk.

443. In principle, assets financed by unrestricted or restricted PSIA do not represent risks for the IIFS's own (shareholders') capital and thus would not entail a regulatory capital requirement for the IIFS. This implies that assets funded by PSIA would be excluded from the calculation of the denominator of the capital adequacy ratio; that is, IIFS would not be required to hold regulatory capital in respect of risk arising from PSIA-funded assets.

444. In practice, however, an IIFS may be constructively obliged to smooth the profits payout to UIAH (and, where applicable, to RIAH) due to commercial pressure,¹²⁶ regulatory

¹²⁵ The UPSIA holders have an ownership claim as *rabb al-māl* to the net asset value of their funds, and in this respect do not rank *pari passu* with shareholders. Shareholders are, on the other hand, liable up to the amount of their capital in the IIFS for amounts deposited by current account holders and other creditors of the IIFS.

¹²⁶ IIFS may face competitive pressures to pay IAH a market-related return to prevent withdrawal of funds by IAH.

requirements¹²⁷ or management strategy¹²⁸ using various smoothing techniques (mentioned in section 4.4.3). A necessary consequence of some of these smoothing practices adopted by IIFS is that a portion of risk (i.e. volatility of the stream of profits) arising from assets managed on behalf of UIAH is effectively transferred to the IIFS's own capital, a phenomenon known as displaced commercial risk. As a result of DCR (see section 4.4.4 for an explanation), commercial risks of assets financed by UPSIA are considered to be borne proportionately by both the UIAH and the IIFS. Hence, instead of excluding all the assets funded by PSIA from the denominator of the CAR discussed in paragraph 443 to reflect DCR, a proportion of the RWA funded by UPSIA is required to be included in the denominator of the CAR. This portion of RWA is denoted by the Greek letter "alpha". The quantification and use of this alpha parameter in the CAR calculation are subject to supervisory discretion. (See section 4.4.6 for a discussion of the calculation of alpha.)

4.4.3 Smoothing Practices

445. In order to mitigate withdrawal risk, IIFS resort to various smoothing techniques, depending upon various internal and regulatory considerations mentioned earlier. IIFS use these techniques alternatively to, and/or in combination with, other techniques listed below. These techniques may or may not transfer the risk of assets financed by PSIA funds to shareholders, as explained in the following:

- a. *Adjusting the muḍārib share:* An IIFS can smooth returns paid to IAH by temporarily reducing its *muḍārib* share below the contractual share (which tends, in practice, to be set at a maximum level) and/or by otherwise assigning a lower profit share to shareholders, even if the IIFS is not contractually obliged to do so. However, this mechanism can only be used for income smoothing in the absence of losses, as investment losses on PSIA funds are to be borne by the IAH themselves, while the IIFS merely receives no share of profit as *muḍārib*.
- b. *Transferring from shareholders' funds:* IIFS management may (with the shareholders' approval) donate some portion of the shareholders' income to IAH on the basis of *hibah*, so as to offer the latter a level of return close to the market benchmark level, when the overall investment returns of the IIFS are lower than the benchmark.

¹²⁷ A supervisory authority may require the IIFS to maintain smoothing reserves and/or use other techniques to pay returns to IAH that take into account prevailing market rates. Supervisory authorities normally take these steps in order to reduce withdrawal risk by IAH in response to poorer-than-expected returns by IIFS, which, if unmitigated, can reach systemic proportions and be a cause of concern from a financial stability perspective.

¹²⁸ IIFS management may manage investment risks as well as expectations of IAH so that the extent of risk (i.e. the volatility of returns) that is retained by shareholders, and the amount of risk that is borne by IAH, is managed through a set of smoothing techniques, thereby maintaining the capital requirements of IIFS.

- c. *Maintaining a profit equalisation reserve:* An IIFS may establish PER by setting aside amounts from the investment profits before allocation between the shareholders and the UIAH¹²⁹ and the calculation of the IIFS's *muḍārib* share of profits. The components of the accumulated PER that are owned pro-rata by UIAH and the shareholders can be drawn down to smooth the profit payouts attributable to UIAH when investment returns decline.
- d. *Establishing an investment risk reserve:* An IIFS may also maintain a reserve called IRR by setting aside amounts from the investment profits attributable to the UIAH, after deducting the IIFS's *muḍārib* share of profits. The accumulated IRR, which belongs entirely to UIAH, can be used only to cushion any losses (negative asset returns) attributable to UIAH that might arise from time to time.

4.4.4 Displaced Commercial Risk

446. The term “displaced commercial risk” refers to the extent of additional risk borne by an IIFS’s shareholders (i.e its own capital) in comparison to the situation where the IAH assume all commercial risks associated with the assets financed by their funds. While in principle the IIFS has full discretion as to whether it performs this displacement of commercial risk, in practice it may find itself virtually obliged to do so due to various reasons mentioned in paragraph 444. The rate of return paid to the IAH (especially UIAH) is thus “smoothed” at the expense of the profits attributable to the IIFS’s shareholders. Such a situation would most often arise:

- a. as a result of rate of return risk (otherwise referred to as "profit rate risk"), where the IAH’s funds are invested in assets such as *murābahah* or *ijārah* with a relatively long maturity and at a rate of return which no longer meets current market expectations. A lower rate of return on assets than that currently expected by the UIAH could result in the withdrawal of funds by them, exposing the IIFS to liquidity risk. In its efforts to limit these risks, an IIFS can employ smoothing techniques; or
- b. in respect of other market risks (such as price risk) or credit risk when an IIFS wishes to protect its IAH from the effects of the poor overall performance of a portfolio of assets under its management (subject to the Sharī`ah prohibition of the *muḍārib* making good an overall loss to the investor).

447. By using the PER, IIFS may maintain the profit payouts to UIAH at market-related levels when the actual asset returns are higher, by making appropriations to the PER. These appropriations may be reversed when actual asset returns are lower than market-related

¹²⁹ In some countries, the appropriation of income is to be made after taking into consideration the tax effect.

levels. In addition, appropriations to IRR can be made from the IAH share of profit, to be reversed when asset returns are negative. In case IIFS are able to manage the distribution of returns on UPSIA entirely through adjustments in PER without adjusting the *muḍārib* share of profits and/or having any recourse to income transfer from shareholders (explained in section 4.4.3(a) and (b)), there will be no DCR, and no consequent requirement for the IIFS to support an additional capital charge.

448. The formulation of prudential reserves may not, however, entirely mitigate DCR. This is because of the limitations of PER and IRR themselves. Apart from corporate governance restraints on the setting up of these reserves, mentioned in detail in section 4.2 of IFSB GN-3, excess accumulation of PER and IRR may be constrained by supervisory authorities.¹³⁰ Further, the required magnitude of the displacement of risk from UIAH to shareholders by adjusting the *muḍārib* share of profits and/or income transfer from shareholders to achieve a desired rate of return to UIAH depends upon the available level of PER, the market benchmark return, and the actual investment return of the IIFS. The relationship between the IIFS's investment returns and the risk transfer to UIAH is expected to be negative, since the larger the investment return, the less is the need for transfer of risks from shareholders. The larger the negative correlation between these two, the greater is the DCR to which shareholders are exposed, and hence the larger is the capital requirement.

449. It should be noted that DCR does not relate to covering an overall loss attributable to UIAH by reallocating profit from shareholders, as Shari'ah rules and principles do not permit this. IIFS should cover such losses by maintaining an IRR, and if the IRR balance is insufficient to cover the loss entirely, no further amounts may be transferred from the PER in order to make a profit payout to the IAH. However, if the balances of the PER and IRR are sufficient, this may permit the payment of targeted levels of return to UIAH even when actual asset returns are negative.

4.4.5 Determination of Alpha (α)

450. Supervisory authorities should assess the extent of risks borne by PSIA and reflect these assessments in the computation of capital adequacy for IIFS in their jurisdiction. The main challenge facing IIFS and their supervisors in this connection is to assess the risk-sharing level between IIFS' own capital (shareholders' funds) and that of the IAH. As mentioned above, the proportion of RWAs that needs to be included in the CAR to cater for the transfer of risk from IAH to IIFS is denoted by "alpha". The supervisory assessment of how an IIFS manages the risk–return mix of PSIA would determine the alpha factor, with a

¹³⁰ See paragraph 63 of IFSB GN-3.

value of alpha near zero reflecting an investment-like product with the investor bearing the commercial risk, while a value of alpha close to 1 would reflect a deposit-like product with the depositor effectively bearing virtually no commercial risk. PSIA could also be positioned anywhere along a continuum between these two cases, depending upon the extent of investment risks actually borne by the IAH.

451. The IFSB issued GN-4 (*Guidance Note on the Determination of Alpha in the CAR for IIFS*) in March 2011 which outlines a methodology to estimate the value of alpha to be used in the supervisory discretion formula in calculating the CAR of IIFS. It has also demonstrated how to measure the DCR – that is, the additional risk that IIFS shareholders may assume in order to cushion the returns payable to IAH against variations in asset returns. This GN has also endeavoured to provide an algebraic approach to the determination of DCR and alpha that can be used by supervisory authorities to decide the appropriate level of alpha for all or some of the IIFS in the jurisdiction. It has, however, cautioned that supervisory authorities need to require additional data in order to estimate the level of exposure to DCR and thereby arrive at reasonably accurate estimates of alpha. In this context, supervisory and regulatory authorities will need, in the first place, to determine data requirements for the calculation of DCR and alpha. This, in turn, may require assessing the existing accounting frameworks, and requirements in their jurisdictions for reporting and disclosure to the supervisor.

452. IFSB GN-4 provided guidance on a number of supervisory discretion issues when estimating the value of alpha for IIFS, looking at the DCR risk profile of the latter, at both institution and jurisdiction levels. It further cautioned that higher values of alpha may be applicable in jurisdictions where IAH tend to be highly protected by the governments and central banks for strategic reasons. In this context, it has been recommended that supervisory authorities should base their judgments on the actual legal status of PSIA in their jurisdictions (i.e. whether PSIA are de jure or de facto capital certain because of legal or regulatory/supervisory requirements, or are led to expect market-related returns, or are protected by Shari`ah-compliant deposit insurance in the jurisdiction).

SECTION 5: CAPITAL REQUIREMENTS FOR ISLAMIC FINANCING AND INVESTMENT ASSETS

453. The minimum capital requirements for the nine classes of Islamic financing assets are set out below, taking into account both credit risk and market risk as appropriate.

5.1 *Murābahah* and *Murābahah* for the Purchase Orderer

5.1.1 *Introduction*

454. This section sets out the minimum capital requirements to cover the credit and market risks arising from entering into contracts or transactions that are based on the Sharī`ah rules and principles of *murābahah* and *murābahah* for the purchase orderer (MPO).

455. In *murābahah* and MPO, the capital requirement for credit risk refers to the risk of a counterparty not paying the purchase price of an asset to the IIFS. In the case of market (price) risk, the capital requirement is applicable with respect to: (a) assets in the IIFS's possession which are available for sale either on the basis of *murābahah* or MPO; and (b) assets which are in its possession due to the customer's non-performance of a promise to purchase (PP) in either non-binding or binding MPO.

456. The supervisory authority has discretion to apply to IIFS the relevant provisions of this section for other forms of sale contract – namely, *musāwamah* and *bay` bithaman ajil*.

457. This section is divided into (a) *murābahah* and non-binding MPO, and (b) binding MPO, as the types of risk faced by the IIFS are different at the various stages of the contract for the two categories. This classification and the distinctions between a non-binding MPO and a binding MPO are subject to the criteria and opinions set out by the respective Sharī`ah Supervisory Board (SSB) of the IIFS or any other SSB as specified by the supervisory authority.

458. A *murābahah* contract is an agreement whereby the IIFS sells to a customer at acquisition cost (purchase price plus other direct costs), plus an agreed profit margin or mark-up, a specified kind of asset that is already in its possession. An MPO contract is an agreement whereby the IIFS sells to a customer at cost (as above), plus an agreed profit margin, a specified kind of asset that has been purchased and acquired by the IIFS based on a PP given by the customer, which may be considered to be either a binding or a non-binding PP.

5.1.2 *Murābahah* and Non-Binding MPO

459. In a *murābahah* transaction, the IIFS sells an asset that is already available in its

possession, whereas in an MPO transaction the IIFS acquires an asset in anticipation that the asset will be purchased by the orderer/customer.

460. This price risk in *murābahah* contracts ceases and is replaced by credit risk in respect of the amount receivable from the customer following the transfer of title in the asset to the customer. Likewise, in a non-binding MPO transaction, the IIFS is exposed to credit risk on the amount receivable from the customer when the latter accepts transfer of title and assumes ownership of the asset.

5.1.3 Binding MPO

461. In a binding MPO, the IIFS has no "long" position in the asset that is the subject of the transaction, as there is a binding obligation on the customer to take delivery of the asset at a predetermined price. The IIFS is exposed to counterparty risk in the event that the orderer in a binding MPO does not honour his/her obligations under the PP, resulting in the IIFS having to dispose of the asset to a third party at a selling price which may be lower than the cost to the IIFS. Depending on the Sharī'ah rulings that are applicable, the risk of selling at a loss may be mitigated by requiring the customer to deposit a *mamish jiddiyah* upon executing the PP, as commonly practised in the case of a binding MPO. The IIFS would have recourse to the customer for any shortfall in the *Hamish jiddiyah* to compensate for the loss, and would be obliged to refund to the customer any amount of the HJ in excess of the loss. The HJ may be treated, after the conclusion of *murābahah*, as part of the payment of the agreed selling price under the *murābahah* contract. Alternatively, the IIFS may take a down-payment (*urbūn*) from the purchase orderer when signing the contract. This payment is retained by the IIFS if the purchase orderer fails to execute the contract, whereas on the execution of the contract the *urbūn* is treated as a payment in advance.

5.1.4 Collateralisation

462. As one of the CRM techniques, the IIFS may secure a pledge of the sold asset or another tangible asset as collateral for the *murābahah* receivable ("collateralised *murābahah*"). Collateralisation is not automatically provided in a *murābahah* contract but must be explicitly stated or must be documented in a separate security agreement at or before the time of signing the *murābahah* contract.¹³¹ The IIFS may employ other techniques such as pledge of deposits, or PSIA, or a third-party financial guarantee. The risk weight of a financial guarantor may be substituted for the risk weight of the purchaser provided that the

¹³¹ In some jurisdictions, on foreclosure the obligations are deemed to be fully discharged, while in other jurisdictions the customer remains liable for any amount of the financing that is not repaid by the realisation of the pledged asset. This is true of collateralised financing generally, not just of collateralised *murābahah* obligations. These differences affect the amount of the "loss-given default".

guarantor has a better credit rating than the purchaser and that the guarantee is legally enforceable.

5.1.5 Credit Risk

5.1.5.1 *Murābahah and non-binding MPO*

463. The credit exposure of a *murābahah* or MPO consists of the balance of the account receivable under the contract which is recorded at its cash-equivalent value – that is, the amount due from the customer at the end of the financial period less any provision for doubtful debts.

464. The account receivable (net of specific provisions) arising from a *murābahah* sale shall be assigned a risk weight based on the credit standing of the obligor (purchaser or guarantor) as rated by an ECAI that is approved by the supervisory authority. In cases where the obligor is unrated, a risk weight of 100% shall apply.

5.1.5.2 *Binding MPO*

465. In a binding MPO, an IIFS is exposed to default on the purchase orderer's obligation to purchase the asset in its possession. In the event of the orderer defaulting on its PP, the IIFS will dispose of the asset to a third party. The IIFS will have recourse to any HJ¹³² paid by the orderer, and (a) may have a legal right to recoup from the orderer any loss on disposing of the asset, after taking account of the HJ; or (b) may have no such legal right. In both cases, this risk is mitigated by the asset in possession as well as any HJ paid by the purchase orderer.

466. In case (a), the IIFS has the right to recoup any loss (as indicated in paragraph 465) from the orderer; that right constitutes a claim receivable which is exposed to credit risk, and the exposure shall be measured as the amount of the asset's total acquisition cost to the IIFS, less the market value of the asset as collateral subject to any haircut, and less the amount of any HJ. The applicable risk weight shall be based on the standing of the obligor as rated by an ECAI that is approved by the supervisory authority. In cases where the obligor is unrated, a risk weight of 100% shall apply.

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

468. In applying the treatment set out in paragraph 467, the IIFS shall ensure that the PP is properly documented and legally enforceable. In the absence of proper documentation and

¹³² The IIFS's recourse to HJ should be within the limits of the actual loss, which is the difference between the actual cost and the sale price of the asset.

legal enforceability, the asset is to be treated as similar to a non-binding MPO which is exposed to price risk, where the measurement approach is as set out in section 5.1.6.1.

469. Upon selling the asset, the accounts receivable amount (net of specific provisions) shall be assigned a risk weight based on the credit standing of the obligor as rated by an ECAI that is approved by the supervisory authority. In cases where the obligor is unrated, a risk weight of 100% shall apply.

5.1.5.3 Exclusions

470. The capital requirement is to be calculated on the receivable amount, net of specific provisions, any amount that is secured by eligible collateral as defined in section 4.1.5.1 and/or any amount that is past due by more than 90 days. The portions that are collateralised and past due are subject to the relevant risk weight as set out in section 4.1.3.100

5.1.5.4 Preferential RW

471. Subject to meeting the minimum requirements as set out in section 4.1.3.7 the risk weight of collateralised *murābahah* may be given a preferential risk weight as set out below for the following types of collateralised asset (see section 4.1.3.7 for the eligibility criteria):

- a. 75% for eligible retail customers or small businesses;
- b. 75% for a *murābahah* contract secured by eligible residential real estate unless otherwise determined by the supervisory authorities; or
- c. 100% for a *murābahah* contract secured by commercial real estate, or 50% in "exceptional circumstances" subject to eligibility criteria.

472. The supervisory authority has discretion to apply these preferential risk weights under appropriate circumstances.

5.1.6 Market Risk

5.1.6.1 *Murābahah* and non-binding MPO

473. In the case of an asset in possession in a *murābahah* transaction and an asset acquired specifically for resale to a customer in a non-binding MPO transaction, the asset would be treated as inventory of the IIFS and, using the simplified approach, the capital charge for such a market risk exposure would be 15% of the amount of the position (carrying value), which equates to a risk weight of 187.5% if the minimum capital requirement is 8%. The 15% capital charge is also applicable to assets held by an IIFS in respect of incomplete non-binding MPO transactions at the end of a financial period.

474. Assets in possession on a "sale or return" basis (with such an option included in the contract) are treated as accounts receivable from the vendor and, as such, would be offset

against the related accounts payable to the vendor. If these accounts payable have been settled, the assets shall be assigned a risk weight of 100% (equal to a capital charge of 8% if that is the minimum capital requirement), subject to (a) the availability of documentation evidencing such an arrangement with the vendor, and (b) the period for returning the assets to the vendor not having been exceeded.

5.1.6.2 Binding MPO

475. In a binding MPO, the orderer has the obligation to purchase the asset at the agreed price, and the IIFS as the seller is not exposed to market risk in respect of the asset, but only to credit risk, as indicated in section 5.1.5.2.

Foreign exchange risk

476. The funding of an asset purchase or the selling of an asset may well expose an IIFS to foreign exchange risk; therefore, the relevant positions should be included in the measures of foreign exchange risk described in section 4.2.6.3.

5.1.7 Summary of Capital Requirements at Various Stages of the Contract

477. The following tables 25 and 26 set out the applicable stages of the contract and the applicable capital charges.

a. Murābahah and non-binding MPO

Table 25			
Applicable Stage of the Contract		Credit Risk Weight	Market Risk Capital Charge
1	Asset available for sale (asset on balance sheet)*	Not applicable	15% capital charge (187.5% RW)
2	Asset is sold and title is transferred to a customer, and the selling price (accounts receivable) is due from the customer	Based on customer's rating or 100% RW for unrated customer (see <u>section 4.1.5.1</u>)	Not applicable
3	Maturity of contract term or upon full settlement of the purchase price, whichever is earlier	Not applicable	Not applicable

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

b. Binding MPO

Table 26			
Applicable Stage of the Contract		Credit Risk Weight**	Market Risk Capital Charge
1	Asset available for sale (asset on balance sheet)*	Asset acquisition cost less market value of asset as collateral (net of any haircut) less any HJ x 100% RW (see <u>section 4.1.5.2</u>)	Not applicable
2	Asset is sold and delivered to a customer (accounts receivable is due from a customer)	Based on customer's rating or 100% RW for unrated customer (see <u>section 5.1.5.2</u> , last paragraph)	Not applicable
3	Maturity of contract term or upon full settlement of the selling price, whichever is earlier	Not applicable	Not applicable

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

***This credit risk weight is applicable only when IIFS will have recourse to any HJ or urbūn paid by the customer, and (depending on the legal situation) in the case of HJ may have a right to recoup from the customer any loss on disposing of the asset, after taking account of the HJ. (This right does not exist in the case of urbūn.)*

If the IIFS has no such right, the cost of the asset to the IIFS constitutes a market risk (as in the case of a non-binding MPO), but this market risk exposure is reduced by the amount of any HJ that the IIFS has the right to retain.

5.2 Commodity *Murābahah* Transactions

5.2.1 Introduction

478. This section sets out the minimum capital requirements to cover the credit and market risks arising from financing contracts that are based on the Sharī`ah rules and principles of commodity *murābahah* transactions, either in the interbank market or to other customers.

479. IIFS can be involved in CMT-based financing in the following forms:¹³³

- a. CMT for interbank operations for managing short-term liquidity surplus (i.e. selling and buying of Sharī`ah-compliant commodities through *murābahah* transactions, which is commonly termed “placement” in conventional institutions) or where the counterparty is the central bank or monetary authority offering a Sharī`ah-compliant lender of last resort and/or a standing facility for effective liquidity management. Such placement/financing is referred to as “commodity *murābahah* for liquid funds (CMLF)”.¹³⁴
- b. CMT for providing financing to a counterparty by a longer-term commodity *murābahah* where the counterparty immediately sells the commodities on the spot market is referred to as “commodity *murābahah* financing (CMF)”.

480. CMLF is a tool for liquidity management for IIFS in order for them to invest their surplus liquid funds on a short-term basis with other market players, within or outside the jurisdiction. In this type of transaction, the risk weight will be influenced by the credit standing of the counterparty receiving the funds and the duration of the placement.

5.2.2 Capital Requirements

481. Based on the general CMT structures, the transactions can pass through several important phases, each of which has different risk implications. Thus, an IIFS is exposed to different risks in different phases of the CMT. Consequently, it is crucial for IIFS to recognise and evaluate the overlapping nature and transformation of risks that exist between various types of risk. Since the dynamism of risk exposure through the phases of CMT is unique, IIFS should break down the contractual timeline for CMT while managing the risks in each phase.

482. An IIFS may be exposed to market risk through any fluctuation in the price of the underlying commodity that comes into its possession for a longer duration than normal – for example, when a customer refuses to honour his commitment to buy or when the agreement

¹³³ See IFSB GN-2 (*Guidance Note on CMT*, issued in December 2010) for details on various risk management and capital adequacy aspects of CMT that can be conducted on both sides of the balance sheet.

¹³⁴ CMLF is also referred to as “commodity *murābahah* investment” by some IIFS in the industry. Strictly speaking, *murābahah* should not be classified as an investment, since in fact it is a type of receivable.

is non-binding. With CMLF and CMF on the asset side, market risk transforms into credit risk; that is, market risk is applicable before selling the commodities to the counterparty, while upon their being sold to the counterparty on deferred payment terms the market risk converts into credit risk. In view of the market practice relating to CMT whereby the commodities are sold instantaneously after being bought on the basis of a binding promise, there would be no market risk. On the other hand, if an IIFS holds title to the commodities for any length of time in the CMT transaction, a market risk exposure will be present. Placement of funds in currencies other than the local currency will also expose the IIFS to foreign exchange risk.

5.2.2.1 Credit risk

483. As in both CMLF and CMF, a binding promise from the customer exists to purchase the commodity; an IIFS will be exposed to default on the customer's obligation to purchase. In the event of default by the customer, the IIFS will dispose of the asset to a third party; that is, the credit risk will be mitigated by the asset in possession as collateral, net of any haircut. The exposure shall be measured as the amount of the total acquisition cost to the IIFS for the purchase of commodities, less the market value of the commodities as collateral, subject to any haircut and specific provisions, if any. The RW of the counterparty shall be applicable to the resultant receivables,¹³⁵ and would be based on credit ratings issued by a recognised ECAI.¹³⁶ In the case of an unrated counterparty, the applicable risk weight will be 100%.

484. In applying the risk weights outlined above, an IIFS should ensure that the contracts for the transactions are properly documented and legally enforceable in a court of law. In the absence of these features, the commodities will be exposed to market risk as set out in the following paragraphs.

5.2.2.2 Market risk

485. In the presence of a binding promise to purchase from the counterparty (section 5.2.2, paragraph 481) and legally enforceable contract documentation as described in paragraph 484, no capital charge will be applicable for market risk. Otherwise, a capital charge for commodities risk will be applicable, and will be measured by using either the maturity ladder approach or the simplified approach as set out in section 4.2.6.4.

486. In case the exposure is denominated in a foreign currency, a capital charge on the foreign currency exposure will be calculated as outlined in section 4.2.6.3.

¹³⁵ In CMLF and CMF on the asset side, the IIFS will be exposed to market risk in the interval before it sells the commodities to the counterparty, and subsequently to credit risk (accounts receivable risk), which will be applicable after the IIFS sells those commodities to the counterparty.

¹³⁶ If the credit exposure is funded and denominated in local currency and the counterparty is a domestic sovereign, a 0% risk weight shall be applied. Otherwise, a higher risk weight as suggested by the credit rating of the foreign sovereign shall be applicable.

5.2.3 Summary of Capital Requirements

487. Table 27 delineates the applicable stage of the CMLF and CMF on the asset side and associated capital charges.

Table 27			
Applicable Stage of the Contract		Credit Risk Weight	Market Risk Capital Charge
1	Commodities on IIFS balance sheet for sale	Total acquisition cost to the IIFS for the purchase of commodities, less the market value of the commodities as collateral, subject to any haircut and specific provisions.	Not applicable*
2	Commodities sold and delivered to the customer	Based on counterparty's rating or 100% RW for unrated customer.	Not applicable

**In the presence of a binding promise from the counterparty to purchase, and legally enforceable contract documentation, there will be no capital charge.*

5.3 Salam

5.3.1 Introduction

488. This section sets out the minimum capital requirement to cover credit and market (price) risks arising from entering into contracts or transactions that are based on the Sharī`ah rules and principles of *salam*. The IIFS is exposed to: (a) the credit (counterparty) risk of not receiving the purchased commodity after disbursing the purchase price to the seller; and (b) the price risk that the IIFS incurs from the date of execution of a *salam* contract, which is applicable throughout the period of the contract and beyond the maturity date of the contract as long as the commodity remains in the ownership of the IIFS, in the absence of a hedge in the form of a parallel *salam* contract covering the subject matter. (A parallel contract may also be used to hedge part of the exposure.)

489. This section is applicable to: (a) *salam* contracts that are executed without any parallel *salam* contracts; and (b) *salam* contracts that are hedged by independently executed parallel *salam* contracts.

490. A *salam* contract is a contract to purchase, at a predetermined price, a specified kind of commodity¹³⁷ which is to be delivered on a specified future date in a specified quantity and quality. The IIFS as the buyer makes full payment of the purchase price upon execution of a *salam* contract or within a subsequent period not exceeding two or three days as deemed permissible by its SSB.

491. In certain cases, an IIFS enters into a separate back-to-back contract, namely a parallel *salam*, to sell a commodity with the same specification as the purchased commodity under a *salam* contract to a party other than the original seller. The parallel *salam* allows the IIFS to sell the commodity for future delivery at a predetermined price (thus hedging the price risk on the original *salam* contract) and prevents the IIFS from having to take delivery of and to warehouse the commodity. As noted above, such a parallel contract may also be used as a partial hedge.

492. The non-delivery of the commodity by a *salam* customer/seller (i.e. counterparty risk) does not discharge the IIFS's obligations to deliver the commodity under a parallel *salam* contract, and thus exposes the IIFS to potential loss in obtaining the supply elsewhere.

493. The obligations of an IIFS under *salam* and parallel *salam* are not interconditional or interdependent, which implies that there is no legal basis for offsetting credit exposures

¹³⁷ A commodity is defined as a fungible physical product which is and can be traded on a secondary market – for example, agricultural products, minerals (including oil) and precious metals (excluding gold and silver). The commodity may or may not be traded on an organised exchange.

between the contracts.

494. In the absence of a parallel *salam* contract, an IIFS may sell the subject matter of the original *salam* contract in the spot market upon receipt, or, alternatively, the IIFS may hold the commodity in anticipation of selling it at a higher price. In the latter case, the IIFS is exposed to price risk on its position in the commodity until the latter is sold.¹³⁸

5.3.2 Credit Risk

495. The receivable amount generated from the purchase of a commodity based on a *salam* contract shall, in appropriate cases, be assigned a risk weight based on the credit standing of a supplier/counterparty as rated by an ECAI that is approved by the supervisory authority. If the supplier/counterparty is unrated (which will normally be the case), a risk weight of 100% shall apply.

5.3.2.1 Exclusions

496. The capital requirement is to be calculated on the receivable amount, net of specific provisions, of any amount that is secured by eligible collateral as defined in [section 4.1.5.1](#) and/or any amount which is past due by more than 90 days. The portions that are collateralised and past due are subject to the relevant risk weight as set out in [section 4.1.2.11](#).

5.3.2.2 Applicable period

497. The credit risk weight is to be applied from the date of the contract made between both parties until the maturity of the *salam* contract, which is upon receipt of the purchased commodity.

5.3.2.3 No offsetting arrangement between credit exposures of *salam* and parallel *salam*

498. The credit exposure amount of a *salam* contract cannot be offset against the exposure amount of a parallel *salam* contract, as an obligation under one contract does not discharge an obligation to perform under the other contract.

5.3.3 Market Risk

499. The price risk on the commodity exposure in *salam* can be measured using either: (a) the maturity ladder approach; or (b) the simplified approach (see [section 4.2.6.4](#)). Under the simplified approach, the capital charge will be equal to 15% of the net position in each

¹³⁸ If the *salam* counterparty (supplier) defaults by failing to deliver the subject matter, the IIFS as buyer has de facto no long position in the subject matter. If there is a parallel *salam* contract, the IIFS is obliged to procure the commodity in the spot market to honour the parallel contract. In the absence of a parallel *salam*, however, it is arguably excessive to require an IIFS to make capital charges for both credit risk and market risk on a *salam* contract. Following this logic, only a market risk capital charge (the larger of the two) may be required. This is a matter for supervisory discretion.

commodity, plus an additional charge equivalent to 3% of the gross positions, long plus short, to cover basis risk and forward gap risk. The 3% capital charge is also intended to cater for potential losses in parallel *salam* when the seller in the original *salam* contract fails to deliver and the IIFS has to purchase an appropriate commodity in the spot market to honour its obligation.

500. The long and short positions in a commodity, which are positions of *salam* and parallel *salam*, may be offset under either approach for the purpose of calculating the net open positions, provided that the positions are in the same group of commodities.

Foreign exchange risk

501. The funding of a commodity purchase or selling of a commodity may well leave an IIFS open to foreign exchange exposures, and in that case the relevant positions should be included in the measures of foreign exchange risk described in section 4.2.6.3.

Supervisory discretion

502. Under the maturity ladder approach for market risk, the supervisory authority has discretion to allow netting between different categories of commodities where the commodities are deliverable against each other or represent close substitutes for each other (provided the exchange of similar commodities would not result in *riba*) and have a minimum correlation of 0.9 between the price movements that can be established over a minimum period of one year (see section 4.2.6.4).

5.3.4 Summary of Capital Requirements at Various Stages of the Contract

503. Tables 28 and 29 set out the applicable stage of the contract that attracts capital charges.

a. Salam with parallel salam

Table 28		
Applicable Stage of the Contract	Credit Risk Weight	Market Risk Capital Charge
1	<p>Payment of purchase price by the IIFS to a <i>salam</i> customer/seller</p> <p>Based on customer's rating or 100% RW for unrated customer</p> <p>No netting of <i>salam</i> exposures against parallel <i>salam</i> exposures</p> <p>See section 5.3.2</p>	<p>Two approaches are applicable: <u>Maturity ladder approach</u> See section 4.2.6.4 <u>Simplified approach</u> 15% capital charge (187.5% RW equivalent) on net position (i.e. netting of <i>salam</i> exposures against parallel <i>salam</i> exposures)</p> <p>Plus: 3% capital charge (37.5% RW equivalent) on gross positions (i.e. <i>salam</i> exposures plus parallel <i>salam</i> exposures)</p> <p>See section 4.3.3</p>
2	<p>Receipt of the purchased commodity by the IIFS</p> <p>Not applicable</p>	<p>See section 4.3.3</p>
3	<p>The purchased commodity is sold and delivered to a buyer</p> <p>Not applicable</p>	<p>Not applicable</p>

b. Salam without parallel salam

Table 29		
Applicable Stage of the Contract	Credit Risk Weight	Market Risk Capital Charge
1	<p>Payment of purchase price by the IIFS to a <i>salam</i> customer (seller)</p> <p>Based on customer's rating or 100% RW for unrated customer</p>	<p><u>Simplified approach</u> 15% capital charge (187.5% RW equivalent) on long position of <i>salam</i> exposures</p>
2	<p>Receipt of the purchased commodity by the IIFS</p> <p>Not applicable</p>	<p>See section 5.3.3</p>
3	<p>The purchased commodity is sold and delivered to a buyer</p> <p>Not applicable</p>	<p>Not applicable</p>

5.4 *Istisnā`*

5.4.1 *Introduction*

504. This section sets out the minimum capital adequacy requirement to cover credit and market (price) risks arising from entering into contracts or transactions that are based on the Sharī`ah rules and principles of *istisnā`*.

5.4.2 *Principles of Istisnā`*

505. An *istisnā`* contract is a contract between a seller (*al-sani`*) and the buyer (*al-mustasni`*) to manufacture or construct a non-existent asset which is to be manufactured or built according to the buyer's specifications and is to be delivered on a specified future date at a predetermined selling price. In an *istisnā`* contract, price and other necessary specifications must also be fixed and fully settled between the buyer and manufacturer/builder. The payments by the buyer in *istisnā`* may be made in advance, during the period of construction reflecting stages of completion, or deferred to a specified future date. The contract of *istisnā`* is a binding contract that cannot be cancelled unilaterally by either party once the manufacturing work starts. If the subject matter does not conform to the specification agreed upon, the buyer has the option to accept or to refuse the subject matter.

506. The subject matter on which transaction of *istisnā`* is based is always an item which needs to be manufactured or constructed, such as a ship, an aircraft or a building, and it cannot be an existing and designated asset. *istisnā`* may also be used for similar projects such as installation of an air-conditioner plant in the customer's factory, or building a bridge or a highway.

507. The price of an asset under this contract is agreed or determined on the contractual date, and such a contract is binding. The price cannot be increased or decreased on account of an increase or decrease in commodity prices or labour cost. The price can be changed subject to the mutual consent of the contracting parties, which is a matter for the commercial decision of the IIFS and can result in a lower profit margin.

5.4.3 *Roles and Exposure of IIFS in an Istisnā` Contract*

508. In practice, an IIFS can play different roles while engaging in the contract of *Istisnā`*, as follows:

a. *IIFS as a seller (al-sani`) in Istisnā` contract*

509. In many cases, an IIFS acts as a "seller" in the *istisnā`* contract and engages the services of a contractor (other than the client) by entering into another *Istisnā`* contract as

buyer¹³⁹ or using some other Sharī`ah-compliant contract such as murābahah.

510. If a parallel *istisnā`* contract is used for manufacturing the asset, the IIFS acts as a buyer in the parallel contract. The IIFS as an intermediary calculates its cost in the parallel contract and fixes the price of *istisnā`* with its client that allows it to make a reasonable profit over his cost. The two contracts, however, need to be totally independent of each other. In order to secure the payment from the ultimate buyer (i.e the customer), the title deeds of the underlying asset, or any other collateral, may be required by the IIFS as a security until the complete payment is made by the ultimate buyer.

b. IIFS as a buyer (al-mustasni') in an Istisnā` contract

511. In some cases, an IIFS can act as a “buyer” in an *istisnā`* contract where it can have an asset constructed by a contractor: (i) for its own account (which can be, for example, subsequently sold or leased on a murābahah or ijārah basis, respectively); or (ii) on the basis of the ultimate customer’s specifications.

512. If the parallel *istisnā`* contract is used in this scenario with the ultimate customer, the IIFS acts a seller in the parallel contract.

513. This section makes distinctions between two types of exposures in *Istisnā`* financing, as follows:

a. Exposure to customer

514. The receipt of the selling price by the IIFS is dependent on the financial strength or payment capability of the ultimate customer or the contractor (cases (a) and (b), respectively, as discussed in paragraph 508), where the source of payment is derived from the various other activities of the ultimate customer or contractor and is not solely dependent on the cash flows from the underlying asset/project.

b. Exposure to asset (i.e. exposure to the cash flows from the completed asset)

515. The receipt of the selling price by the IIFS is dependent partially or primarily on the amount of revenue generated by the asset being manufactured or constructed by selling its output or services to contractual or potential third-party buyers. This form of *Istisnā`* faces “revenue risk” arising from the asset’s ability to generate cash flows, instead of the creditworthiness of the ultimate customer or project sponsor (cases (a) and (b), respectively, as discussed in paragraph 508). Such exposure normally arises when an *istisnā`* contract is used in project finance and BOT (build, operate, transfer) transactions.

¹³⁹ Where two such parallel *istisnā`* contracts exist, it is customary to refer to one of the contracts as a “parallel *istisnā`*”. Typically, it is the contract which is entered into second which is referred to as the “parallel *istisnā`*”.

516. In the *istisnā`* contract, the IIFS assumes the completion risk¹⁴⁰ that is associated with the failure to complete the project at all, delay in completion, cost overruns, occurrence of a force majeure event, and unavailability of qualified personnel and reliable seller(s) or subcontractors, including any late completion penalty¹⁴¹ payable to the ultimate customer due to non-fulfilment of required specifications.

5.4.4 Capital Adequacy Requirements

517. The exposures under *istisnā`* involve credit and market risks, as described below. Credit exposures arise once the work is billed to the customer, while market (price) exposures arise on unbilled work-in-process.

518. There is a capital requirement to cater for the credit (counterparty) risk of the IIFS not receiving the selling price of the asset from the ultimate customer or contractor, either in pre-agreed stages of completion and/or upon full completion of the manufacturing or construction process. (The risk of a customer failing to complete such a transaction in project finance is referred to as "off-take risk" – see Appendix D.)

519. This section also sets out the capital adequacy requirement to cater for the market risk that an IIFS incurs from the date of manufacturing or construction, which is applicable throughout the period of the contract on unbilled WIP inventory.

520. This section is applicable to both (a) *istisnā`* contracts that are executed without any parallel *istisnā`* contracts, and (b) *istisnā`* contracts that are backed by independently executed parallel *istisnā`* contracts.

521. Keeping in view the different risk and capital adequacy implications for an IIFS performing different roles (as seller or as buyer) in an *istisnā`* contract, as highlighted in section 5.4.3, both scenarios will be discussed separately in the following.

5.4.4.1 IIFS as a Seller (*al-Sani`*) in an *Istisnā`* Contract

Istisnā` with parallel *istisnā`*

522. In cases where an IIFS enters into a parallel *istisnā`* contract to procure an asset from a party other than the original *istisnā`* customer (buyer), the price risk relating to input materials is mitigated. The IIFS remains exposed to the counterparty risk of the parallel *istisnā`* seller in delivering the asset on time and in accordance with the *istisnā`* ultimate buyer's specifications. This is the risk of not being able to recover damages from the parallel

¹⁴⁰ In conventional project financing, the completion risk is normally borne by the project sponsor/contractor, and not by the bank, because the project sponsor/contractor has most often been asked to provide an undertaking to cover cost overruns.

¹⁴¹ Normally, the contract between the IIFS and the contractor will specify in a penalty clause the latter's liability for penalties in case of delays for which it is responsible.

istisnā` seller for the losses resulting from the breach of contract.

523. The failure of the parallel *istisnā`* seller to deliver a completed asset which meets the ultimate buyer's specifications does not discharge the IIFS's obligations to deliver the asset ordered under an *istisnā`* contract, and thus exposes the IIFS to potential loss in making good the shortcomings or obtaining the supply elsewhere.

524. The obligations of an IIFS under *istisnā`* and parallel *istisnā`* contracts are not interconditional or interdependent, which implies that there is no legal basis for offsetting credit exposures between the contracts.

1.7 Credit risk

a. Exposure to customer

525. The receivable amount generated from selling of an asset based on an *istisnā`* contract with full exposure to the customer (ultimate buyer) shall be assigned a risk weight based on the credit standing of the customer as rated by an ECAI that is approved by the supervisory authority. Please refer to section 4.1.3 for the risk weight. In cases where the ultimate buyer is unrated, a risk weight of 100% shall apply.

b. Exposure to asset

526. When the project is rated by an ECAI, the risk weight based on the credit rating of the ultimate buyer is applied to calculate the capital adequacy requirement. Otherwise, the risk weight shall be based on the "supervisory slotting criteria" approach for specialised financing (project finance), as set out in [Appendix D](#), which carries RWs as given below:

Supervisory Categories	Strong	Good	Satisfactory	Weak
External credit	BBB– or better	BB+ or BB	BB– to B+	B to C–
Risk weights	70%	90%	115%	250%

527. *Istisnā`* financing with an "exposure to asset" structure is required to meet the characteristics as set out below in order to qualify for the above risk weight:

- i. the segregation of the project's liabilities from the balance sheet of the *istisnā`* ultimate buyer or project sponsor from a commercial and accounting perspective which is generally achieved by having the *istisnā`* contract made with a special-purpose entity set up to acquire and operate the asset/project concerned;
- ii. the ultimate buyer is dependent on the income received from the assets acquired/projects to pay the purchase price;
- iii. the contractual obligations give the manufacturer/constructor/IIFS a substantial degree of control over the asset and the income it generates – for example, under

- the BOT arrangement where the manufacturer builds a highway and collects tolls for a specified period as a consideration for the selling price; and
- iv. the primary source of repayment is the income generated by the asset/project rather than relying on the capacity of the ultimate buyer.

c. Exclusions

528. The capital requirement is to be calculated on the receivable amount, net of specific provisions, any amount that is secured by eligible collateral as defined in section 4.1.5.1, and/or any amount which is past due by more than 90 days. The portions that are collateralised and past due are subject to the relevant risk weight as set out in section 4.1.3.10.

529. Any portion of an *istisnā`* contract covered by an advance payment shall carry a risk weight of 0%, or the amount of the advanced payment shall be offset against the total amount receivable or amounts owing from progress billings.

d. Applicable period

530. The credit risk weight is to be applied from the date when the manufacturing or construction process commences and until the selling price is fully settled by the IIFS, either in stages and/or on the maturity of the *istisnā`* contract, which is upon delivery of the manufactured asset to the *istisnā`* ultimate buyer.

e. Offsetting arrangement between credit exposures of istisnā` and parallel istisnā`

531. The credit exposure amount of an *istisnā`* contract is not to be offset against the credit exposure amount of a parallel *istisnā`* contract, because an obligation under one contract does not discharge an obligation to perform under the other contract.

1.8 Market risk

Exposure to customer

a. Istisnā` with parallel istisnā`

532. There is no capital charge for market risk to be applied in addition to provisions related to credit risk above, subject to there being no provisions in the parallel *istisnā`* contract that allow the seller to increase or vary its selling price to the IIFS, under unusual circumstances. Any variations in a parallel *istisnā`* contract that are reflected in the corresponding *istisnā`* contract which effectively transfers the whole of the price risk to an *istisnā`* customer (ultimate buyer) is also eligible for this treatment.

b. Istisnā` without parallel istisnā`

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

534. This inventory is held subject to the binding order of the *istisnā`* ultimate buyer and is thus not subject to inventory price as described in section 4.2.6.4. However, this inventory is exposed to the price risk as described in paragraph 508.

Foreign exchange risk

535. Any foreign exchange exposures arising from the purchasing of input materials, or from parallel *istisnā`* contracts made, or the selling of a completed asset in foreign currency, should be included in the measures of foreign exchange risk described in section 4.2.6.3.

5.4.4.2 IIFS as a Buyer (al-Mustasni`) in an Istisnā` Contract

Istisnā` with parallel istisnā`

536. In cases where an IIFS enters into parallel *istisnā`* to sell an asset to an ultimate customer, its price risk relating to input materials is mitigated. The IIFS remains exposed to the counterparty risk of the *istisnā`* supplier in delivering the asset on time and in accordance with the parallel *istisnā`* ultimate buyer's specifications. This is the risk of not being able to recover damages from the *istisnā`* supplier for the losses resulting from the breach of contract.

537. The failure of the *istisnā`* supplier to deliver a completed asset which meets the ultimate buyer's specifications does not discharge the IIFS's obligations to deliver the asset ordered under a parallel *istisnā`* contract, and thus exposes the IIFS to potential loss in making good the shortcomings or obtaining the supply elsewhere.

538. The obligations of an IIFS under *istisnā`* and parallel *istisnā`* contracts are not interconditional or interdependent, which implies that there is no legal basis for offsetting credit exposures between the contracts.

1.9 Credit risk

a. Exposure to customer

539. The receivable amount generated from selling of an asset based on a parallel *istisnā`* contract with full exposure to the ultimate customer shall be assigned a risk weight based on the credit standing of the customer as rated by an ECAI that is approved by the supervisory authority. Please refer to section 4.1.3 for the risk weight. In cases where the ultimate buyer is unrated, a risk weight of 100% shall apply.

b. Exposure to asset

540. When the project is rated by an ECAI, the risk weight based on the credit rating of the "off-taker" (third-party buyer) is applied to calculate the capital adequacy requirement. Otherwise, the risk weight shall be based on the "supervisory slotting criteria" approach for specialised financing (project finance) as set out in Appendix D, which carries risk weights as given below:

Supervisory Categories	Strong	Good	Satisfactory	Weak
External credit	BBB– or better	BB+ or BB	BB– to B+	B to C–
Risk weights	70%	90%	115%	250%

541. The "exposure to asset" *istisnā`* structure is required to meet the characteristics as set out in paragraph 532.

c. Exclusions

542. The capital requirement is to be calculated on the receivable amount, net of specific provisions, any amount that is secured by eligible collateral as defined in section 4.1.4.1, and/or any amount which is past due by more than 90 days. The portions that are collateralised and past due are subject to the relevant risk weight as set out in section 4.1.3.11.

543. Any portion of a parallel *istisnā`* contract covered by an advance payment shall carry a risk weight of 0%, or the amount of the advanced payment shall be offset against the total amount receivable from the ultimate customer or amounts owing from progress billings.

d. Applicable period

544. The credit risk weight is to be applied from the date when the manufacturing or construction process commences and until the selling price is fully settled by the IIFS, either in stages and/or on the maturity of the *istisnā`* contract, which is upon delivery of the manufactured asset to the parallel *istisnā`* ultimate buyer.

e. Offsetting arrangement between credit exposures of istisnā` and parallel istisnā`

545. The credit exposure amount of a parallel *istisnā`* contract is not to be offset against the credit exposure amount of an *istisnā`* contract (or vice versa) because an obligation under one contract does not discharge an obligation to perform under the other contract.

1.10 Market risk

Exposure to customer

a. Istisnā` with parallel istisnā`

546. There is no capital charge for market risk to be applied in addition to provisions on credit risk discussed above, subject to there being no provisions in the istisnā` contract that allow the supplier to increase or vary its selling price to the IIFS under unusual circumstances. Any variations in a parallel istisnā` contract that are reflected in the corresponding istisnā` contract which effectively transfers the whole of the price risk to a parallel istisnā` customer (ultimate buyer) are also eligible for this treatment.

b. Istisnā` without parallel Istisnā`

547. In this case, the IIFS is making progress payments to the *istisnā`* supplier, thereby acquiring title to WIP inventory. This WIP inventory is exposed to price risk. As there is no parallel *istisnā`* sale to an ultimate customer, there is no credit risk.

548. The WIP should receive a capital charge appropriate to inventory – that is, 15% (equivalent to a risk weight of 187.5% if the minimum capital requirement is 8%).

Foreign exchange risk

549. Any foreign exchange exposures arising from the purchasing of input materials, or from parallel *istisnā`* contracts made, or the selling of a completed asset in foreign currency should be included in the measures of foreign exchange risk described in section 4.2.6.3.

5.4.5 Summary of Capital Requirements at Various Stages of the Contract

550. The following tables set out the applicable stage of the contract that attracts capital charges.

5.4.5.1 IIFS as a Seller (*al-Sani`*) in an *Istisnā`* Contract

a. Exposure to customer

i. Istisnā` with parallel istisnā`

Table 30		
Applicable Stage of the Contract	Credit Risk Weight	Market Risk Capital Charge
Unbilled WIP inventory	Based on ultimate buyer's rating or 100% RW for unrated buyer No netting of <i>istisnā`</i> exposures against parallel	Nil, provided that there is no provision in the parallel <i>istisnā`</i> contract that allows the seller to increase or vary the selling price See market risk under <u>section</u>

Amounts receivable after contract billings	<i>istisnā`</i> exposures See credit risk under <u>section 5.4.4.1</u>	<u>5.4.4.1</u>
Maturity of contract term or upon full settlement of the purchased price by an <i>istisnā`</i> buyer, whichever is the earlier	Not applicable	Not applicable

ii. Istisnā` without parallel istisnā`

Table 31		
Applicable Stage of the Contract	Credit Risk Weight	Market Risk Capital Charge
Unbilled WIP inventory	Based on ultimate buyer's rating or 100% RW for unrated buyer	1.6% capital charge (equivalent to 20% RW) on WIP inventory See market risk under <u>section 5.4.4.1</u>
Progress billing to customer	Based on ultimate buyer's rating or 100% RW for unrated buyer	Not applicable
Maturity of contract term or upon full settlement of the purchased price by an <i>istisnā`</i> buyer, whichever is the earlier	Not applicable	Not applicable

b. Exposure to asset

i. Istisnā` with parallel istisnā` (for project finance)

Table 32		
Applicable Stage of the Contract	Credit Risk Weight	Market Risk Capital Charge
Unbilled WIP inventory	Based on buyer's ECAI rating, if available, or supervisory slotting criteria that ranges from 70% to 250% RW	Not applicable
Amounts receivable after contract billings	No netting of <i>istisnā`</i> exposures against parallel <i>istisnā`</i> exposures See credit risk under section 5.4.4.1	
Maturity of contract term or upon full settlement of the purchased price by an <i>istisnā`</i> customer, whichever is the earlier	Not applicable	Not applicable

5.4.5.2 IIFS as a Buyer (*al-Mustasni`*) in an *Istisnā`* Contract

551. The following tables set out the applicable period of the contract that attracts capital charges.

a. *Exposure to customer*

i. *Istisnā` with parallel istisnā`*

Table 33		
Applicable Stage of the Contract	Credit Risk Weight	Market Risk Capital Charge
Unbilled WIP inventory	Based on ultimate buyer's rating or 100% RW for unrated buyer No netting of <i>istisnā`</i>	Nil, provided that there is no provision in the parallel <i>istisnā`</i> contract that allows the seller to increase or vary the selling price

Table 33			
Applicable Contract	Stage of the	Credit Risk Weight	Market Risk Capital Charge
Amounts receivable after contract billings		<p>exposures against parallel <i>istisnā`</i> exposures</p> <p>See credit risk under section 5.4.4.2</p>	See market risk under section 5.4.4.2
Maturity of contract term or upon full settlement of the purchased price by an <i>istisnā`</i> buyer, whichever is the earlier		Not applicable	Not applicable

ii. *Istisnā` without parallel istisnā`*

Table 34			
Applicable Contract	Stage of the	Credit Risk Weight	Market Risk Capital Charge
Amounts of progress payments to supplier for WIP inventory		<p>None (no ultimate <i>Istisnā`</i> customer)</p> <p>See credit risk under 5.4.4.2</p>	<p>15% (equivalent to 187.5% RW) for WIP inventory</p> <p>See market risk under section 5.4.4.2</p>

b. *Exposure to asset*

i. *Istisnā` with parallel istisnā` (for project finance)*

Table 35			
Applicable Contract	Stage of the	Credit Risk Weight	Market Risk Capital Charge

Unbilled WIP inventory	Based on buyer's ECAI rating, if available, or supervisory slotting criteria that ranges from 70% to 250% RW No netting of <i>istisnā`</i> exposures against parallel <i>istisnā`</i> exposures	Not applicable
Amounts receivable after contract billings	See credit risk under section 5.4.4.2	
Maturity of contract term or upon full settlement of the purchased price by an <i>istisnā`</i> customer, whichever is the earlier	Not applicable	Not applicable

5.5 *Ijārah and Ijārah Muntahia Bittamlīk*

5.5.1 *Introduction*

552. This section sets out the minimum capital requirements to cover counterparty risk and residual value risk of leased assets, arising from an IIFS entering into contracts or transactions that are based on the Sharī`ah rules and principles of *ijārah* and *ijārah muntahia bittamlīk* (IMB), also known as *jārah wa iqtinā*. The section also covers the market (price) risk of assets acquired for *ijārah* and IMB.

553. In an *ijārah* contract (either operating or IMB), the IIFS as the lessor maintains its ownership of the leased asset while transferring the right to use the asset, or usufruct, to a customer as the lessee, for an agreed period at an agreed consideration. All liabilities and risks pertaining to the leased asset are to be borne by the IIFS as lessor, including obligations to restore any impairment and damage to the leased asset arising from wear and tear and natural causes which are not due to the lessee's misconduct or negligence. Thus, in both *ijārah* and IMB, the risks and rewards (and obligations and rights) of ownership remain with the lessor, except for the residual value risk at the term of an IMB which is borne by the lessee. The lessor is exposed to price risk on the asset while it is in the lessor's possession prior to the signature of the lease contract, except where the asset is acquired following a binding promise to lease (PL) as described in paragraph 561.

554. In an IMB contract, the lessor promises to transfer to the lessee its ownership in the leased asset at the end of the contract as a gift or as a sale for a specified consideration, provided that: (a) the promise is separately expressed and independent of the underlying *ijārah* and the lessor concludes the contract of gift or sale while still completely owning the asset; or (b) a gift contract is entered into that is dependent upon the fulfilment of all the *ijārah* obligations, whereupon ownership shall be automatically transferred to the lessee.

555. In both operating *ijārah* and IMB, the IIFS either possesses the asset before entering into a leased contract or enters into the contract based on a specific description of an asset to be leased and acquired in the future before it is delivered to the lessee. This agreement to lease may be considered as binding (binding PL) or as non-binding (non-binding PL), depending on the applicable Sharī`ah interpretations.

5.5.2 *Operating Ijārah*

556. This section sets out the minimum capital requirements to cater for the lessor's exposures to (a) the credit risk of the lessee as counterparty in servicing the lease rentals, and (b) the market (price) risk attaching to the residual value of the leased asset either at the

end of the *ijārah* contract or at the time of repossession upon default – that is, the risk of losing money on the resale of the leased asset.

5.5.3 IMB

557. In IMB, once the lease contract is signed, the lessor is exposed to credit risk in respect of the lease payments receivable from the lessee (a credit risk mitigated by the asset's value as collateral¹⁴²) and to a type of operational risk in respect of the need to compensate the lessee if the asset is permanently impaired through no fault of the latter. If the leased asset is permanently impaired and is uninsured, the IIFS suffers a loss equal to the carrying value of the leased asset, just as it would if any of its fixed assets were permanently impaired. In the event that the lessee exercises its right to cancel the lease, the lessor is exposed to the residual value of the leased asset being less than the refund of payments due to the lessee. In such a case, the price risk, if any, is already reflected in a "haircut" to be applied to the value of the leased asset as collateral. Therefore, the price risk, if any, is not applicable in the context of the IMB.

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

559. The IIFS may be exposed to losses in cases where a lessee acquiring an asset under IMB decides not to continue with the contract. The lease contract may give the lessee this right subject to certain conditions (such as a minimum period of notice). In such a case, if these conditions are satisfied, the lessor is required to refund to the lessee the capital payments (instalments of the purchase price) that were included in the periodic lease rentals (subject to deduction of any amounts due for unpaid rentals). If the value of the repossessed asset is less than the amount to be refunded (before any such deduction), the difference constitutes a loss to the lessor. This exposes the IIFS as lessor to a form of market risk.¹⁴³

560. In theory, a situation could arise in which, when an IMB contract arrives at its term, the lessee decides not to exercise its option to complete the purchase by making the

¹⁴² The collateral (or "quasi-collateral") used in the context of IMB is of the usufruct, or use value, of the asset, as the IIFS is the owner of the asset.

¹⁴³ The contract should include clauses that cover the treatment of destruction or loss of the property without any fault of the tenant. The contract should also elaborate how the IIFS as a lessor will cover itself in the absence of any *takāful*.

contractually agreed final payment. (The option to purchase places no obligation on the lessee to do so.) The IIFS may thus be exposed to market risk, in respect of a potential loss from disposing of the asset for an amount lower than its net book value. Generally, however, the lessor's exposure in such a case would not be significant, as the option to purchase can be exercised by making a payment of a token amount and the lessee would have no reason to refrain from exercising it. Moreover, the carrying value of the asset in the lessor's books at the term of the IMB (i.e. its amortised book value as assumed in fixing the lease rentals) would be zero or close to zero.

5.5.4 Credit Risk

561. In a PL (which can only be binding), when an IIFS is exposed to default on the lease orderer's obligation to execute the lease contract, the exposure shall be measured as the amount of the asset's total acquisition cost to the IIFS, less the market value of the asset as collateral subject to any haircut, and less the amount of any HJ received from the lease orderer. The applicable risk weight shall be based on the standing of the obligor as rated by an ECAI that is approved by the supervisory authority. In cases where the obligor is unrated, a risk weight of 100% shall apply.

562. In applying the treatment as set out in paragraph 561, the IIFS must ensure that the PL is properly documented and legally enforceable. In the absence of proper documentation and legal enforceability, the asset is to be treated similarly to one in a non-binding PL which is exposed to market (price) risk, using the measurement approach as set out in section 5.5.5 on non-binding PL.

5.5.4.1 Operating *ijārah*

563. In addition to credit risk, mentioned in section 5.5.4, the lessor is exposed to credit risk in respect of the estimated value of the lease payments for the remaining period of the *ijārah*. This exposure is mitigated by the market value of the leased asset which may be repossessed. The net credit risk exposure shall be assigned a risk weight based on the credit standing of the lessee/counterparty as rated by an ECAI that is approved by the supervisory authority. In cases where the lessee is unrated, a risk weight of 100% shall apply.

5.5.4.2 IMB

564. In addition to section 5.5.4, the capital requirement for IMB is based on the following two components:

- a. *Total estimated future ijārah receivable amount over the duration of the lease contract*: This exposure is mitigated by the market value of the leased asset which

may be repossessed. The net credit risk exposure shall be assigned a risk weight based on the credit standing of the lessee/counterparty as rated by an ECAI that is approved by the supervisory authority. In cases where the lessee is unrated, a risk weight of 100% shall apply.

- b. *Price risk attached to the expected residual fair value of a leased asset:* This exposure is treated under section 5.5.5.1.

565. The estimated future *jjārah* receivable amount as indicated in paragraph 564 shall be risk-weighted based on the credit standing of the lessee as rated by an ECAI or at 100%, after deduction of the value of the leased asset as collateral (subject to any haircut).

5.5.4.3 Exclusions

566. The capital requirement is to be calculated on the receivable amount, net of specific provisions, of any amount that is secured by eligible collateral as defined in section 4.1.3.1 and/or any amount which is past due by more than 90 days. The portions that are collateralised and past due are subject to the relevant risk weight, as set out in sections 4.1.3.2 and 4.1.3.11, respectively.

5.5.4.4 Preferential risk weight

567. Subject to meeting the minimum requirements as set out in section 4.1.3.7, a preferential risk weight can be assigned for certain types of leased asset, such as real estate. The supervisory authorities have discretion to apply risk weights appropriate for their circumstances.

5.5.5 Market Risk

568. In the case of an asset acquired and held for the purpose of either operating *jjārah* or IMB, the capital charge to cater for market (price) risk in respect of the leased asset from its acquisition date until its disposal can be categorised as follows:

- a. *Non-binding PL*

569. The asset for leasing will be treated as inventory of the IIFS and, using the simplified approach, the capital charge applicable to such a market risk exposure would be 15% of the amount of the asset's market value (equivalent to a risk weight of 187.5%).

- b. *PL*

570. In a binding PL, an IIFS is exposed to default on the lease orderer's obligation to lease the asset in its possession. In the event of the lease orderer defaulting on its PL, the IIFS will either lease or dispose of the asset to a third party. The IIFS will have recourse to any HJ

paid by the customer,¹⁴⁴ and (i) may have a right to recoup from the customer any loss on leasing or disposing of the asset after taking account of the HJ, or (ii) may have no such right, depending on the legal situation. In both cases, this risk is mitigated by the asset in possession as well as any HJ paid by the lease orderer.

571. In case (i), if the down-payment was made as HJ, the IIFS has the right to recoup any loss (as indicated in the previous paragraph) from the customer; that right constitutes a claim receivable which is exposed to credit risk, and the exposure shall be measured as the amount of the asset's total acquisition cost to the IIFS, less the market value of the asset as collateral subject to any haircut, and less the amount of any HJ. The applicable risk weight shall be based on the standing of the customer as rated by an ECAI that is approved by the supervisory authority. In cases where the obligor is unrated, a risk weight of 100% shall apply.

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

5.5.5.1 Operating ijārah

573. The residual value of the asset will be risk-weighted at 100%. Upon expiry of the lease contract, the carrying value of the leased asset shall carry a capital charge of 15% until the asset is re-leased or disposed of.

5.5.5.2 IMB

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

5.5.6 Summary of Capital Requirements at Various Stages of the Contract

575. The following tables set out the applicable period of the contract that attracts capital charges.

¹⁴⁴ In the case of HJ, the amount can only be deducted for damages – that is, the difference between the asset acquisition cost and the total of lease rentals (when the asset is leased to a third party) or selling price (when the asset is sold to a third party), whichever is applicable.

a. Operating ijārah

	Applicable Stage of the Contract	Credit Risk Weight	Market Risk Capital Charge
1	Asset available for lease (prior to signing a lease contract)	<p><u>Binding PL*</u></p> <p>Asset acquisition cost</p> <p>less (a) market value of asset-fulfilling function of collateral (net of any haircuts), and (b) any HJ</p> <p>multiply by the customer's rating or 100% RW for unrated customer</p>	<p><u>Non-binding PL</u></p> <p>15% capital charge (equivalent to 187.5% RW) until lessee takes possession</p>
2	Upon signing a lease contract and the lease rental payments are due from the lessee	<p>Total estimated value of lease receivables for the whole duration of leasing contract shall be risk-weighted according to the lessee's rating.</p> <p>100% RW for an unrated lessee</p> <p>less recovery value of the leased asset</p>	The residual value will be risk-weighted at 100%
3	Maturity of contract term and the leased asset is returned to the IIFS	Not applicable	15% capital charge of the carrying value of the asset

**This credit risk weight is applicable only when IIFS will have recourse to any HJ paid by the customer, and (depending on the legal situation) may have a right to recoup from the customer any loss on leasing or disposing of the asset to a third party, after taking account of the HJ.*

If the IIFS has no such right, the cost of the asset to the IIFS constitutes a market risk (as in the case of a non-binding PL), but this market risk exposure is reduced by the amount of any HJ that the IIFS has the right to retain.

b. IMB

Table 37			
Applicable Stage of the Contract		Credit Risk Weight	Market Risk Capital Charge
1	Asset available for lease (prior to signing a lease contract)	<u>Binding PL*</u> Asset acquisition cost less (a) market value of asset-fulfilling function of collateral (net of any haircuts), and (b) any HJ	<u>Non-binding PL</u> 15% capital charge (187.5% RW equivalent) until lessee takes possession
2	Upon signing a lease contract and the lease rental payments are due from the lessee	Total estimated value of lease receivables for the whole duration of leasing contract will be risk-weighted according to the lessee's credit rating. 100% RW for an unrated lessee less recovery value of the leased asset	Not applicable
3	Maturity of contract term and the leased asset is sold and the asset ownership is transferred to the lessee	Not applicable	Not applicable

**This credit risk weight is applicable only when IIFS will have recourse to any HJ paid by the customer. In the case of HJ (depending on the legal situation), the IIFS may have a right to recoup from the customer any loss on leasing or disposing of the asset to a third party, after taking account of the HJ, while any excess HJ must be refunded.*

If the IIFS has no such right, the cost of the asset to the IIFS constitutes a market risk (as in the case of a non-binding PL), but this market risk exposure is reduced by the amount of any HJ that the IIFS has the right to retain.

5.6 *Mushārah* and Diminishing *Mushārah*

5.6.1 *Introduction*

576. This section sets out the minimum capital adequacy requirement to cover the risk of losing invested capital arising from entering into financing contracts or transactions that are based on the Sharī`ah rules and principles of *mushārah* and diminishing *mushārah* where the IIFS and its customers/partner(s) contribute to the capital of the partnership and share its profits or losses.

577. This section is applicable to both (a) *mushārah*, in which all the partners' shares remain constant throughout the contract period; and (b) diminishing *mushārah*, in which the share of the IIFS is gradually reduced during the tenure of the contract until all of it has been sold to the other partner(s).

578. A *mushārah* is an agreement between the IIFS and a customer to contribute capital in various proportions to an enterprise, whether existing or new, or to ownership of a real estate or movable asset, either on a permanent basis, or on a diminishing basis where the customer progressively buys out the share of the IIFS (“diminishing *mushārah*”). Profits generated by that enterprise or real estate/asset are shared in accordance with the terms of the *mushārah* agreement, while losses are shared in proportion to the respective contributor's share of capital.

5.6.2 *Mushārah*

579. This section sets out the minimum capital adequacy requirement to cater for “capital impairment risk”, the risk of losing the amount contributed to an enterprise or joint ownership of an asset. An IIFS acts as a partner in a *mushārah* contract and is exposed to the risk of losing its capital upon making payment of its share of capital. A *mushārah* can expose the IIFS to capital impairment risk and/or to normal credit risk, depending on the structure and purpose of the *mushārah* and the types of asset in which the funds are invested (see [section 4.1.3.99](#)). The invested capital is redeemable either by liquidation of the *mushārah* assets at the end of a contract which has a fixed tenure or as mutually agreed by the partners, or upon divestment of partnership in an ongoing *mushārah* subject to giving notice to other partners. The amount of capital redemption is represented by the value of a share of capital, which is dependent on the quality of the underlying investments or assets, and their ability to generate profits and cash flows from the *mushārah*.

580. As a partner in a *mushārah* contract, the IIFS is not entitled to a fixed rate of return and is thus exposed to variable profits generated by the partnership which are shared on a

basis as agreed in the *mushārah* contract, whereas losses are to be borne by the IIFS and its partners according to their respective ratio of invested capital. Therefore, the IIFS is exposed to entrepreneurial risk of an active partner that manages the partnership and business risks associated with the underlying activities and types of investments or assets of the partnership.

581. For the purpose of determining the minimum capital adequacy requirement, this section makes distinctions between the four main categories of *mushārah* as set out below:

- a. *Private commercial enterprise to undertake trading activities in foreign exchange, shares and/or commodities*

This type of *mushārah* exposes the IIFS to the risk of underlying activities – namely, foreign exchange, equities or commodities.

- b. *Private commercial enterprise to undertake a business venture (other than (a))*

This type of *mushārah* exposes the IIFS to the risk as an equity holder, which is similar to the risk assumed by a partner in venture capital or a joint venture, but not to market risk. As an equity investor, the IIFS serves as the first loss position and its rights and entitlements are subordinated to the claims of secured and unsecured creditors. For further explanation of the nature of risk in such ventures, see paragraphs 208 to 225 ([section 4.1.3.9.1](#)).

- c. *Joint ownership of real estate or movable assets (such as cars) is divided into two subcategories*

Mushārah in an ijārah contract

Ownership of such assets can produce rental income for the partnership, through leasing the assets to third parties by means of *ijārah* contracts. In this case, the risk of the *mushārah* investment is essentially that of the underlying *ijārah* contracts – that is, credit risk mitigated by the collateral represented by the leased assets.

However, in some cases the lessee is not a third party but the IIFS's partner as customer. The existence of such an *ijārah* subcontract in addition to a *mushārah* exposes the IIFS to credit risk in respect of the partner's obligation to service the lease rentals.

Mushārah in a murābahah contract

The IIFS is entitled to its share of revenue generated from selling the assets to third parties by means of *murābahah* contracts that expose the IIFS to credit risk in respect of the *murābahah* receivables from the buyer/counterparty.

5.6.3 Diminishing Mushārah

582. The IIFS's position in a diminishing *mushārah* is set out in section 4.1.3.9.2.

5.6.4 Equity Position Risk

Mushārah

583. For *mushārah*, the equity exposure can be measured based on the nature of the underlying investments as follows:

- a. for investments held in the trading book, exposure is equal to the fair value; and
- b. for investments held to maturity, exposure is equal to the carrying value, which may be the fair value or the historical cost less any provisions for impairment.

584. The *mushārah* exposures, net of specific provisions, shall be measured as follows:

- a. *Private commercial enterprise to undertake trading activities in foreign exchange, shares or commodities*

The risk weight shall be based on the applicable underlying assets as set out in the market risk section in section 4.2.

The investment in foreign exchange and trading in gold/silver shall be measured according to the treatment as set out in section 4.2.6.3, which requires an 8% capital charge on the greater of either net long or net short positions in foreign exchange and an 8% capital charge on the net long position of gold/silver.

The risk weight of a *mushārah* that invests in quoted shares shall be measured according to the equity position risk approach, where positions in assets tradable in markets will qualify for treatment as equity position risk in the trading book, which would incur a total capital charge of 16% (equivalent to 200% RW) as set out in section 4.2.4.1.

Investment in commodities shall be measured according to either the maturity ladder approach or the simplified approach, as set out in section 4.2.4.4.

- b. *Private commercial enterprise to undertake a business venture (other than (a))*

There are two possible methods used to calculate the equity exposures in this type of investment:

- i. *Simple risk-weight method*: The risk weight shall be applied to the exposures (net of specific provisions) based on equity exposures in the banking book. The risk weight under the simple risk weight method for equity position risk in respect of an equity

exposure in a business venture shall entail a 400% RW for shares that are not publicly traded less any specific provisions for impairment. If there is a third-party guarantee to make good impairment losses, the risk weight of the guarantor shall be substituted for that of the assets for the amount of any such guarantee.

- ii. *Supervisory slotting method*: An IIFS is required to map its risk weights into four supervisory categories as set out in Appendix D (specialised financing) where the risk weight of each category is as follows:

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

The above risk weights under the slotting method for specialised financing include an additional fixed factor of 20% RW to cater for potential decline in the *mushārah*'s net asset value. For further explanation, also see paragraphs 208 to 225 (section 4.1.3.9.1).

- c. *Joint ownership of real estate and movable assets (such as cars)*

Mushārah in an ijārah contract

Income-producing *mushārah* through leasing to third parties by means of *ijārah* contracts exposes the capital contributor to the risk of that underlying *ijārah* contract – that is, counterparty risk mitigated by the value of leased assets.

This *mushārah* investment shall be assigned a risk weight based on the credit standing of the counterparty/lessee, as rated by an ECAI that is approved by the supervisory authority, and a 100% RW on the residual value of an *ijārah* asset (operating lease). In cases where the counterparty is unrated, a risk weight of 100% shall apply. (Please refer to the treatment for *ijārah* as set out in section 5.5.6.)

Mushārah in a murābahah contract

Income-producing *mushārah* through selling to third parties by means of *murābahah* contracts exposes the capital contributor to the risk of that counterparty/buyer.

This *mushārah* investment shall be assigned a risk weight based on the credit standing of the counterparty/buyer, as rated by an ECAI that is approved by the supervisory authority. In cases where the counterparty is unrated, a risk weight of 100% shall apply. (Please refer to the treatment for *murābahah* as set out in section 5.1.)

Diminishing *mushārahah*

The equity exposure in a diminishing *mushārahah* contract, where the IIFS has provided funds for the working capital of the partnership and intends to transfer its full ownership in the partnership to the other partner over the life of the contract, is calculated based on the remaining balance of the amount invested (measured at historical cost, including any share of undistributed profits) less any specific provision for impairment. This exposure shall be risk-weighted according to the nature of the underlying assets as set out in section 4.1.3.9.2. If there is a third-party guarantee to make good impairment losses, the risk weight of the guarantor shall be substituted for that of the assets for the amount of any such guarantee. Moreover, IIFS can use the slotting method after necessary supervisory approval, based on the criteria set out in [Appendix E](#) (diminishing *mushārahah*).

5.6.5 Summary of Capital Requirements for *Mushārahah* Categories

585. Table 38 sets out the *mushārahah* categories that attract capital charges.

Table 38		
<i>Mushārahah</i> Category	Credit Risk Weight	Market Risk Capital Charge
Private commercial enterprise to undertake trading activities in the foreign exchange, share and/or commodity	Not applicable	Depends on the underlying asset as set out in the applicable market risk section
Private commercial enterprise to undertake business venture OTHER THAN trading activities in the foreign exchange, share and/or commodity	(a) <u>Simple RW method</u> 250% RW of the contributed amount* to the business venture less any specific provisions. (If there is a third-party guarantee, the risk weight of the guarantor shall be substituted for that of the assets for the amount of any such guarantee) Or (b) <u>Slotting method</u> Between 90–270% RW of the contributed amount* to the business venture based on the four categories	Not applicable
Joint ownership of real estate and movable assets (<i>mushārahah</i> with <i>ijārah</i> subcontract, <i>mushārahah</i> with <i>murābahah</i> subcontract)	Based on lessee's (for <i>ijārah</i> subcontract) or customer's (for <i>murābahah</i> subcontract) rating or 100% RW for unrated lessee or customer	Please refer to the market risk capital charge requirements as set out under the subcontracts

**In the case of diminishing mushārahah, the contributed amount is based on the remaining balance of the invested amount.*

5.7 *Mudārabah*

5.7.1 *Introduction*

586. This section sets out the minimum capital requirement to cover the risk of losing invested capital arising from entering into contracts or transactions that are based on the Sharī'ah rules and principles of *muḍārabah* where the IIFS assumes the role of capital provider (*rabb al-māl*). This section is applicable to both restricted and unrestricted *muḍārabah* financing.

587. A *muḍārabah* is an agreement between the IIFS and a customer whereby the IIFS would contribute capital to an enterprise or activity which is to be managed by the customer as the *muḍārib*. Profits generated by that enterprise or activity are shared in accordance with the terms of the *muḍārabah* agreement, while losses are to be borne solely by the IIFS unless the losses are due to the *muḍārib*'s misconduct, negligence, or breach of contracted terms.

588. A *muḍārabah* financing can be carried out on either:

- (a) a restricted basis, where the capital provider allows the *muḍārib* to make investments subject to specified investment criteria or certain restrictions such as types of instrument, sector or country exposures; or
- (b) an unrestricted basis, where the capital provider allows the *muḍārib* to invest funds freely based on the latter's skills and expertise.

589. As the fund provider, the IIFS is exposed to the risk of losing its capital investment, or "capital impairment risk", upon making payment of the capital to the *muḍārib*. Any loss on the investment is to be borne solely by the capital provider, but is limited to the amount of his/her capital.¹⁴⁵ Losses that are due to misconduct, negligence or breach of contractual terms are to be borne by the *muḍārib*.

590. However, while it is not permissible for a *muḍārib* to give a guarantee against such losses, such a guarantee may be given by a third party on the basis of *tabarru'* (donation). In such a case, the amount of the *muḍārabah* capital so guaranteed may be considered as subject to credit risk with a risk-weighting equal to that of the guarantor. In particular, such guarantees may be given when liquid funds are placed in an Islamic interbank market under a *muḍārabah* contract.

591. Apart from such placements, *muḍārabah* contracts are commonly used for the

¹⁴⁵ Unless the capital provider has authorised the borrowing and investment in the *muḍārabah* of a sum in addition to the amount of its own capital that it has provided, in which case the capital provider is also responsible for this additional amount.

investment purposes mentioned in paragraph 593.

592. In assigning the risk weight, consideration is given to the intent of the *muḍārabah* investment, and to the nature of the underlying assets. The intent may be: (a) the purchase of assets for trading; (b) investing on an equity basis in an ongoing business venture with the intention of holding the investment for an indefinite period, perhaps with a view to eventual sale (e.g. venture capital investments); or (c) project finance. The underlying assets may be tradable assets such as commodities, foreign exchange or securities, or business assets such as real property, plant and equipment, and working capital. Real property and movable property may also be purchased with a view to generating rental income by means of *ijārah* contracts.

593. For the purpose of calculating the minimum capital requirement, this section makes distinctions between the three main categories of *muḍārabah*, as set out below:

- a. *Private commercial enterprise to undertake trading activities in foreign exchange, shares or commodities*

This type of *muḍārabah* exposes the IIFS to the risk of the underlying activities – namely, foreign exchange, equity or commodities.

- b. *Private commercial enterprise to undertake a business venture (other than (a))*

This type of *muḍārabah* exposes the IIFS to risk as an equity holder, which is similar to the risk assumed by a partner in venture capital or a joint venture, but not to market risk. As an equity investor, the IIFS serves as the first loss position and its rights and entitlements are subordinated to the claims of secured and unsecured creditors. For further explanation of the nature of risk in such ventures, see paragraphs 208 to 214 ([section 4.1.3.9.1](#)).

- c. *Muḍārabah investments in project finance*

An IIFS advances funds to a customer who acts as *muḍārib* in a construction contract for a third-party customer (ultimate customer). The ultimate customer will make progress payments to the *muḍārib* who, in turn, makes payments to the IIFS. The essential role of the IIFS in this structure is to provide bridging finance to the *muḍārib* pending its receipt of the progress payments. In this *muḍārabah* structure:

- a. the IIFS has no direct or contractual relationship with the ultimate customer (but the IIFS may stipulate that payments by the ultimate customer to the *muḍārib* be made to an account (“repayment account”) with the IIFS which has been opened for the purpose of the *muḍārabah* and from which the *muḍārib* may not make

withdrawals without the IIFS's permission); and

- b. the IIFS as investor advances funds to the construction company as *muḍārib* for the construction project and is entitled to a share of the profit of the project but must bear 100% of any loss.

594. The IIFS is exposed to the risk on the amounts paid to the *muḍārib*, and as these amounts are made on a profit-sharing and loss-bearing basis they are treated under credit risk as "equity positions in the 'banking book'". In principle, the IIFS's credit exposure is to the *muḍārib*, not to the ultimate customer; however, as described below, a structure may involve the use of a "repayment account" to receive progress payments from the ultimate customer, which transfers much of the credit risk to the latter.

595. In addition to credit risk (i.e. that the *muḍārib* has received payment from the ultimate customer but fails to pay the IIFS, or that the ultimate customer fails to pay), the IIFS is exposed to capital impairment in the event that the project results in a loss.

596. Direct payment by ultimate customer into a "repayment account" opened with the IIFS and effectively pledged to the IIFS. Much of the IIFS's credit exposure to the *muḍārib* may be transferred to the ultimate customer under this structure involving the "repayment account". If the ultimate customer is a sovereign or otherwise has a very low risk weighting, this may affect the risk weight to be applied to the exposure, and other credit risk mitigants may be applied, as described below.

597. Provided the construction work proceeds normally and to the ultimate customer's satisfaction, the risk attaching to the progress payments due from the ultimate customer to the *muḍārib* will be the credit risk of the ultimate customer. However, this does not per se constitute a mitigation of the credit risk of the IIFS's exposure to the *muḍārib*. In such a case, if an independent engineer employed to certify that the work has reached a certain stage of completion has issued a certificate to that effect, so that a progress payment is due from the ultimate customer, from the point of view of the IIFS the amount of that progress payment due is no longer exposed to the risk of unsatisfactory performance by the *muḍārib*, but only to the latter's failure to pay the IIFS (the *muḍārib* being exposed to possible default by the ultimate customer). Such an amount might thus arguably bear a risk weight based entirely on the credit standing of the *muḍārib* – that is, say 100%, rather than 250%. However, if a binding agreement exists between the IIFS and the ultimate customer whereby the latter will make the payment into a "repayment account" with the IIFS, the latter's credit exposure in respect of the amount due is transferred from the *muḍārib* to the ultimate customer.

598. Other structures may be used which have the effect of modifying the risk exposures

of the investors in a *muḍārabah*. The determination of the risk exposure (nature and amount) shall take into account any such structures and this shall also be reflected in the application of risk weights.

5.7.2 *Equity Position Risk*

599. The equity exposure can be measured based on the nature of the underlying investments as follows:

- a. for investments held in the trading book, the exposure is equal to the fair value; or
- b. for investments held to maturity, the exposure is equal to the carrying value – that is, either the fair value or the historical cost less any provisions for impairment.

600. The *muḍārabah* exposures, net of specific provisions, shall be measured as discussed below.

- a. *Private commercial enterprise to undertake trading activities in foreign exchange, shares or commodities*

The risk weight shall be based on the applicable underlying assets as set out in the market risk section in section 4.2.

An investment in foreign exchange and trading in gold/silver shall be measured according to the treatment set out in section 4.2.6.3, which requires an 8% capital charge on the greater of either net long or net short positions and an 8% capital charge on the net position of gold/silver.

The risk weight of a *muḍārabah* that invests in quoted shares shall be measured according to the equity position risk approach where positions in assets tradable in markets will qualify for treatment as equity position risk in the trading book, which would incur a total capital charge of 16% (equivalent to 200% RW) as set out in section 4.2.4.1.

Investment in commodities shall be measured according to either the maturity ladder approach or the simplified approach, as set out in section 4.2.

- b. *Private commercial enterprise to undertake a business venture (other than (a))*

There are two possible methods used to calculate the equity exposures in this type of investment – that is: (i) the simple risk-weight method; and (ii) the slotting method. The calculation details are set out in paragraphs 208 to 225 (section 4.1.3.9.1).

- c. *Muḍārabah investment in project finance*

601. The IIFS’s overall credit exposure in respect of the *muḍārabah* in such a case can be divided into three parts:

- i. the amount receivable by the IIFS from the *muḍārib* in respect of progress payments due to the *muḍārib* from the ultimate customer for work certified as having reached a certain stage of completion: if a binding agreement exists as described in paragraph 597, whereby the amount will be paid by the ultimate customer into a “repayment account” with the IIFS, a risk weight will reflect the credit standing of the ultimate customer. In the absence of such an agreement, the risk weight would reflect the credit standing of the *muḍārib* (or 100% RW for unrated customer);
- ii. the amount held in the “repayment account” with the IIFS, which would have a risk-weighting of 0%; and
- iii. for any remaining balance of the funds advanced by the IIFS to the *muḍārib*, which would incur a risk weight of between 250% and 400% under the simple risk weight method, or between 90% and 270% under the slotting method, unless otherwise rated, the treatment as set out in paragraph 600(b) applies.

5.7.3 Summary of Capital Requirements for Muḍārabah Categories

602. Table 39 and 40 set out the *muḍārabah* categories that attract capital charges.

Table 39		
Muḍārabah Category	Credit Risk Weight	Market Risk Capital Charge
Private commercial enterprise to undertake trading activities in the foreign exchange, share and/or commodity	Not applicable	Depends on the underlying asset as set out in the applicable market risk section
Private commercial enterprise to undertake business venture OTHER THAN trading activities in the foreign exchange, share and/or commodity	(a) <u>Simple risk-weight method</u> 250% RW* of the contributed amount to the business venture less any specific provisions Or: (b) <u>Slotting method</u> Between 90% and 270% RW of the contributed amount to the business venture based on the four categories	Not applicable

Muḍārabah investment in project finance

Table 40			
Applicable Stages in a Contract		Credit Risk Weight	Market Risk Capital Charge
1	<u>Prior to certification</u> , where funds are already advanced by the IIFS to the <i>muḍārib</i>	Risk weight is based on the rating of either the ultimate customer or the <i>muḍārib</i> . Otherwise, 250% RW is applied to an unrated <i>muḍārib</i> . However, 400% RW may be applied if the exposure qualified as unlisted equity exposure.	Not applicable
2	<u>After certification</u> , where the amount is receivable by the IIFS from the <i>muḍārib</i> in respect of progress payment to the <i>muḍārib</i> from the ultimate customer	If a "repayment account" or similar mitigation structure is used, risk weight is based on the credit standing of the ultimate customer on the amounts receivable by the IIFS from the <i>muḍārib</i> (or 100% RW for unrated customer).	Not applicable

5.8 Qard

5.8.1 Introduction

603. This section sets out the minimum capital requirement to cover the risk of losing capital arising from entering into contracts or transactions that are based on the Sharī`ah rules and principles of *qard*.

604. *Qard* is a loan given by an IIFS, where the borrower is contractually obliged to repay only the principal amount borrowed.¹⁴⁶ In the contract of *qard*, no payment in addition to the principal amount lent may be required, as that would be a form of *riba*.

605. If a fixed period of repayment is stipulated in the contract, the borrower is liable to pay back the principal amount to the IIFS on or before the agreed date of payment. On the other hand, if no period is stipulated in the contract, it is binding upon the borrower to make a repayment of the loaned amount to the lender on demand.

5.8.2 Collateralisation

606. As one of the CRM techniques, IIFS can secure a pledge of a tangible asset. The collateralisation is not automatically provided in a *qard* contract but must be explicitly stated or must be documented in a separate security agreement at or before the time of signing of the *qard* contract. The IIFS may employ other techniques such as pledge of deposits/PSIA or a third-party financial guarantee.

5.8.3 Credit Risk

607. IIFS are exposed to credit risk in the event that the borrower fails to repay the principal amount in accordance with the agreed terms of the contract. In a fixed-period *qard* contract, credit risk exposure commences upon the execution of the contract until the full repayment by the borrower.

608. The credit exposure shall be measured based on account receivable in *qard* – that is, the amount due from the customer at the end of the financial period less any provision for doubtful debts.

¹⁴⁶ As a business entity, IIFS provide financing to their customers to perform their role as financial intermediary and seek an opportunity to earn profits for their enterprise and for distribution to their shareholders and fund providers. Therefore, most IIFS will not be providing any significant amount of lending on the basis of *qard*, as Sharī`ah rules and principles require the borrower to pay only the principal amount in that case. Nonetheless, an IFSB survey has shown that, in several jurisdictions, some IIFS do provide *qard*-based lending for different reasons. These vary widely among IIFS and may include: (a) lending to some specific type of clients such as the poor, needy or widows, etc. as a part of corporate social responsibility practice; (b) lending out of their charity account (built out of their non-permissible income) to small entrepreneurs and new businesses that do not have access to sufficient assets that can be used as collateral; (c) lending as a part of their business product – that is, not out of the charity account; (d) providing funding to various microfinance institutions or customers; and (e) lending mainly for marketing or public acceptance purposes, where a small portion of the overall financing portfolio is allocated to support certain activities of underprivileged sections of the population, etc.

609. The account receivable amount (net of specific provisions) arising from the *qarḍ* contract shall be assigned a risk weight based on the credit standing of the borrower, as rated by an ECAI that is approved by the supervisory authority (see section 4.1.3). In cases where the borrower is unrated, a risk weight of 100% shall apply. The risk weight of a financial guarantor can be substituted for the risk weight of the borrower provided that the guarantor has a better credit rating than the borrower and that the guarantee is legally enforceable. If an exposure is covered by multiple CRM techniques, the exposure will be segregated into segments covered by each type of CRM technique as specified in section 4.1.5.5. For any uncovered exposure, the risk weight of the underlying counterparty shall apply.

5.8.4 Market Risk

610. In the case where a cash loan is provided by the IIFS, there is no element of market risk. If, however, a loan is provided in a currency other than the local currency or in the form of a commodity, the related market risk will be applicable, as mentioned in [section 4.2](#) of this Standard.

5.8.5 Summary of Capital Requirements for Qarḍ-Based Lending

611. Table 40 sets out capital charges for lending on the basis of *qarḍ*.

Table 41		
Exposure	Credit Risk Weight	Market Risk Capital Charge
Accounts receivable from customer	Exposure is equal to the amount of loan (less specific provisions) X customer's rating (or 100% RW for unrated customer).	Not applicable*

*Applicable only if *qarḍ*-based lending is made in the foreign currency or in commodities.

5.9 Wakālah

5.9.1 Introduction

612. This section sets out the minimum capital adequacy requirement to cover the risk of losing invested capital arising from an IIFS entering into asset-side financing contracts or transactions that are based on the Sharī`ah rules and principles of *wakālah*.

613. An IIFS assumes the role of a principal (*muwakkil*) and appoints the customer as agent (*wakīl*) to carry out a specified set of services or act on its behalf. This section is applicable to both restricted and unrestricted *wakālah* financing.

614. *Wakālah* is a contract of agency whereby one person contracts to perform any work or provide any service on behalf of another person. Businesses rely on a range of individuals to act on their behalf; these include employees, directors, partners, and a range of professional agents. An action performed by an agent on behalf of the principal will be deemed to be an action by the principal. An agent will obtain a payment wage for services rendered according to the contractual reward structure offered by the principal which may incorporate a performance-related element.

615. A *wakālah*¹⁴⁷ is thus an agreement in which one party (*muwakkil*) appoints the other (*wakīl*) to act on its behalf to accomplish certain specified services or activities. Profits generated by any such activity are distributed to the *muwakkil* less the *wakīl* fee, in accordance with the terms of the *wakālah* agreement. In case the contract includes some “indicative” or “expected” profit rate on the investment, the *wakālah* contract can include a clause stipulating that the *wakīl*'s remuneration may be: (a) any gain in excess of the “expected” profit rate; or (b) a certain share of profit added to a pre-agreed flat fee, subject to approval from the relevant Sharī`ah board.

616. A *wakālah* financing can be carried out on either:

- a. a restricted basis, where the capital provider allows the *wakīl* to make investments subject to specified investment criteria or certain restrictions such as types of instrument, sector or country exposures; or

¹⁴⁷ Another term used by IIFS for investment of funds on a *wakālah* basis is *wakālah al-istismār*. In a *wakālah al-istismār* contract (meaning agency services for management of funds), an IIFS can manage the funds of other investors (which can be individuals, corporate entities, institutions or IIFS) against a pre-agreed flat fee irrespective of the profit or loss on the relevant investment. This fee may be paid in one lump sum or as periodic (e.g. monthly or annual) remuneration as a percentage of the amount invested or the net asset value of the fund. Any one of the aforesaid bases should be agreed before the launch of any fund or other financial product by an IIFS that is working as *wakīl*.

- b. an unrestricted basis, where the capital provider allows the *wakīl* to invest funds freely based on the latter's skills and expertise. For interbank *wakālah*, the *wakīl* is permitted by the *muwakkil* to invest the investment amount on a discretionary basis, but only in Sharī`ah-compliant transactions.

617. As the *muwakkil*, the IIFS is exposed to the risk of losing its invested capital – that is, capital impairment risk. Any loss on the investment is to be borne solely by the *muwakkil*, but is limited to the amount of its capital. Losses that are due to fraud, misconduct, negligence or breach of contractual terms are to be borne by the *wakīl*. The *wakīl* shall be entitled to any pre-agreed flat *wakīl* fee irrespective of whether the actual profit is less than, equal to or greater than any expected profit, and also in the event of a loss.

618. However, while it is not permissible for a *wakīl* to give a guarantee against losses or for any indicative or expected profits, such a guarantee may be given by a third party on the basis of *tabarru'* (donation). In such a case, the amount of the *wakālah* capital so guaranteed may be considered as subject to credit risk with a risk weighting equal to that of the guarantor. In particular, such guarantees may be given when liquid funds are placed in an Islamic interbank market under a *wakālah* contract.

619. In the absence of any fraud, misconduct, negligence or breach of contractual terms on the part of *wakīl*, all the risk of loss on the investment is to be borne by the *muwakkil*. Therefore, the IIFS is exposed to the skills of the *wakīl* that manages the investments on behalf of the IIFS, as well as to business risks associated with the underlying activities and types of investments or assets of the *wakālah* agreement.

5.9.2 Capital Requirements

620. For the purpose of determining the minimum capital requirements, this section makes distinctions between the following main categories of *wakālah*:

- a. *wakālah* investments to undertake trading activities in foreign exchange, shares and/or commodities, including CMT;
- b. *wakālah* investments with a private commercial enterprise to undertake business activities (other than (a)); and
- c. *wakālah* placement in the interbank market.

621. The *wakālah* exposures, net of specific provisions, shall be measured as set out below.

- a. *Wakālah investments to undertake trading activities in foreign exchange, shares and/or commodities, including CMT*

622. The risk weight shall be based on the applicable underlying assets as set out in the market risk in section 4.2.

623. An investment in foreign exchange and trading in gold or silver shall be measured according to the treatment as set out in section 4.2.6.3, which requires an 8% capital charge on the greater of either net long or net short positions and an 8% capital charge on the net position of gold/silver.

624. The risk weight of a *wakālah* for funds that are invested in quoted shares shall be measured according to the equity position risk approach, where positions in assets tradable in markets will qualify for treatment as equity position risk in the trading book, which would incur a total capital charge of 16% (equivalent to 200% RW) as set out in section 4.2.6.1.

625. Investment in commodities shall be measured according to either the maturity ladder approach or the simplified approach as set out in section 4.2.6.4.

626. If the *wakālah* investment is to be utilised by the *wakīl* (another IIFS) for conducting CMT to earn a (fixed rate of) profit, the investing IIFS is primarily exposed to the counterparty risk. In that case, the invested amount (net of specific provisions) shall be assigned a risk weight based on the credit standing of the counterparty as rated by an approved ECAI. In cases where the counterparty is unrated, a risk weight of 100% shall apply (see section 5.2).

b. *Wakālah investments with private commercial enterprise to undertake business activities (other than (a))*

627. This type of *wakālah* investment exposes the IIFS to capital impairment risk, as explained above. Due to this downside risk, the risk weight shall be measured according to equity position in the banking book approach. The risk weight shall be applied to the exposures net of specific provision, if any.

628. As explained in sections 5.6 and 5.7, there are two possible methods used to calculate the equity exposures – that is: (i) the simple risk-weight method; and (ii) the slotting method.

- i. The risk weight under the simple risk-weighting method shall entail a 250–400% RW.
- ii. Under supervisory slotting criteria, an IIFS is required to map its risk weight into four supervisory categories as set out in Appendix D (specialised financing) where the risk weights of each category are as follows:

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

629. The above risk weights under the slotting method for specialised financing include an additional fixed factor of 20% RW to cater for potential decline in the *wakālah* net asset value.

630. For further explanation, also see paragraphs 208 to 225 ([section 4.1.3.9.1](#)).

c. *Wakālah placement in the interbank market*

631. An IIFS may place liquid funds with a central bank or another IIFS on a *wakālah* basis in order to obtain a return on those funds. Such placements are considered to be more secure than those mentioned in category (a) above, owing to the available credit standing of, and the established relationship with, the counterparty in the interbank market.

632. As mentioned above, a placement of funds made by an IIFS with another IIFS under a *wakālah* agreement (whether on a restricted or unrestricted basis) may be subject to a Sharī'ah-compliant guarantee from a third party. Such a guarantee can be related to the amount of principal invested, as well as to the expected return. In such cases, the capital should be treated as subject to credit risk, with a risk weighting equal to that of the guarantor provided that the risk weight of that guarantor is lower than the risk weight of the *wakīl* as counterparty. Otherwise, the risk weight of the *wakīl* shall apply. As explained in [section 4.1.3.11](#) related to *muḍārabah* interbank placement, interbank placement received on a *wakālah* basis can also be effectively treated as a liability by the IIFS receiving the funds. In the absence of any guarantee mentioned earlier, the risk weighting can be applied based on the credit standing of the counterparty as rated by an approved ECAI, or a risk weight of 100% for an unrated counterparty.

633. If the funds placed under a *wakālah* arrangement are placed in a foreign currency, in addition to the above treatment, capital charge related to foreign exchange risk will be applicable as outlined in [section 4.2.6.3](#).

5.9.3 Summary of Capital Requirements for Wakālah Categories

634. Table 41 sets out the *wakālah* categories that attract capital charges.

Table 42		
Exposure	Credit Risk Weight	Market Risk Capital Charge
<i>Wakālah</i> investments to undertake trading activities in foreign exchange, shares and/or commodities, including CMT	Not applicable	Depends on the underlying asset as set out in the applicable market risk section See section 4.2.6.3 for <i>wakālah</i> investments in foreign exchange See section 4.2.6.1 for <i>wakālah</i> investments in shares See section 3.2.4.4 for <i>wakālah</i> investments in commodities See section 4.2 for <i>wakālah</i> investments in CMT
<i>Wakālah</i> investments with private commercial enterprise to undertake business activities, other than above categories	(a) <u>Simple risk-weight method</u> 250–400% RW of the placed amount less any specific provisions Or: (b) <u>Slotting method</u> Between 90% and 270% RW of the contributed amount to the business venture based on the four categories	Not applicable
<i>Wakālah</i> placement in the interbank market	Risk weighting can be applied based on the credit standing of the counterparty* as rated by the approved ECAI, or a risk weight of 100% for an unrated counterparty.	Not applicable ^c

*In the case of a third-party guarantee, the capital should be treated as subject to credit risk with a risk weighting equal to that of the guarantor provided that the risk weight of that guarantor is lower than the risk weight of the wakīl as counterparty. Otherwise, the risk weight of the wakīl shall apply.

^cIf funds are invested in foreign exchange, foreign exchange risk will also be applicable as per [section 4.2.6.3](#).

SECTION 6: TREATMENT OF EXPOSURES RELATED TO *SUKŪK*

6.1 Introduction

635. This section deals with minimum capital adequacy requirements in relation to (i) IIFS holdings of *sukūk*; and (ii) the exposures of an IIFS where it is, or acts in a capacity such that it is considered to be:

- a. the *originator* of a *sukūk* issue;
- b. an issuer of *sukūk*;
- c. a servicer of a *sukūk* issuance; or
- d. a provider of credit enhancement to a *sukūk* issuance.

636. *Sukūk* (plural of *sakk*) are certificates, with each *sakk* representing a proportional undivided ownership right in tangible and intangible assets, monetary assets, usufructs, services, debts¹⁴⁸ or a pool of these assets, or a business venture (such as a *muḍārabah* or *mushārah*). These assets, which must be clearly identifiable,¹⁴⁹ may be in a specific project or investment activity in accordance with Sharī`ah rules and principles. Issuance of *sukūk*, including the utilisation of funds raised through such issuance, should not involve any elements of *riba*, *gharar* and activities prohibited by Sharī`ah. The ownership right on *sukūk* assets may be either a right of legal ownership (commonly referred to in the market as “asset-backed *sukūk*”) or a right of beneficial ownership through a trust which holds the assets for the benefit of the *sukūk* holders (commonly referred to in the market as “asset-based *sukūk*”).

6.2 Features of *Sukūk* Structures

637. *Sukūk* are based on securitisation structures which, in the case of asset-backed *sukūk*, insulate the *sukūk* holders from exposure to any financial problems of the originator and, due to the ownership of underlying assets, expose them to losses in the event of impairment of the securitised assets. The applicable risks are thus those of the underlying assets, and these will in principle be reflected in any credit rating issued by a recognised ECAI. For such *sukūk*, it is necessary that the key securitisation elements are in place to ensure that *sukūk* holders have legal title and realisable security over the assets (see section 6.2.1). It follows from this characterisation of asset-backed *sukūk* that the underlying

¹⁴⁸ It is not considered permissible in most jurisdictions to securitise debt claims or other receivables for the purpose of issuing *tradable sukūk*. In most jurisdictions, Sharī`ah scholars require that, to be tradable, *sukūk* must not solely represent receivables or debts, except in the case of a trading or financial entity selling all its assets, or a portfolio with a standing financial obligation, in which some debts, incidental to physical assets or usufruct, were included unavoidably.

¹⁴⁹ See [section 5.5](#) (assets in securitisations) for details.

(securitised) assets must be transferred to the sukūk investors (or to an SPE for their benefit) by a “true sale”, thus conferring on them true and effective rights of ownership. The underlying assets are derecognised from the balance sheet of the originator, who has no financial liability to the sukūk investors. The assets are “bankruptcy-remote” from the originator in case the latter becomes insolvent. In case of a default of the sukūk (e.g. because ijārah lessees of the assets fail to pay what is due), the investors have recourse to the assets (physical assets or the usufruct thereof), not to the originator.

638. However, in some issuances the investors’ ownership is of a beneficial nature (through a trust over the securitised assets). Such issuances may be made, for example, because of legal impediments to the transfer of legal ownership of sovereign assets or for other reasons that make the transfer of true and effective rights of ownership problematic (see paragraph 642).¹⁵⁰ Since the sukūk investors in such cases have beneficial rather than legal ownership of the underlying assets, in case of default the investors have recourse to the originator. This Standard deals with the prudential issues raised for IIFS by their involvement in the issuance and holding of sukūk, whether asset-backed or asset-based, from the perspective of capital adequacy.

6.2.1 Securitisation Process for Sukūk Structuring

639. Securitisation for sukūk is the financial engineering process for the creation and issuance of sukūk, where:

- a. payment of face value and income is derived from the cash flows generated by the securitised assets, or by the pool of assets that underlie the issuance of the

¹⁵⁰ According to the Shari`ah Board of the IFSB, *sukūk* assets must be undividedly owned by the *sukūk* holders either directly or through their agent (SPE). This ownership should be valid from both the legal and Shari`ah perspectives, in the sense that the *sukūk* holders (whether as individuals or through their agent – i.e., an SPE) have the ownership of the underlying assets. The ownership of the underlying assets should be transferred to the *sukūk* holders and registered in their names with legal authorities. (These *sukūk* may be known, rather incongruously, in the market as “asset-backed”.) However, in jurisdictions where there is a prohibition on transferring legal titles to such assets, in this case only the beneficial ownership is permitted to be transferred to the *sukūk* holders (such *sukūk* may be known, rather incongruously, in the market as “asset-based”) based on the following conditions:

(a) The definition of beneficial ownership must be stated clearly in the *sukūk* document. The beneficial ownership of *sukūk* assets refers to valid ownership with all the rights and obligations, but excluding the right of registration in the legal authorities. (b) There must be a statement by the transferor (by the way of trust certificate) in order to confirm that the valid ownership has been transferred to the *sukūk* holders along with associated rights and obligations. (c) The SPE does not have any right to utilise these assets without prior permission from the *sukūk* holders to the fact that the assets have been registered under the SPE’s name as a fiduciary only. (d) The trust certificate, as mentioned above, can be enforced by the official authorities that prohibit the legal transfer of the underlying assets to the *sukūk* holders. In case of breach of, or not being able to take into consideration, any of these conditions, the *sukūk* is not permitted to be issued legitimately from a Shari`ah perspective on the basis of such assets.

sukūk;¹⁵¹ and

- b. legal or beneficial ownership of the underlying assets is transferred to the investors in the form of *sukūk*.

640. Contrary to the conventional securitisation where receivables and associated “collateral rights”¹⁵² are transferred to the bondholders, Sharī’ah-compliant securitisation involves legal or beneficial ownership rights in the underlying assets being transferred to *sukūk* holders.

641. The ownership of assets, or a pool of assets, to be securitised is transferred to an SPE which is set up to manage the assets on behalf of the *sukūk* holders and to issue the *sukūk*. (See [section 6.2.5](#) for details on SPE.) The contractual terms of the *sukūk* issuance determine the rights of the investors in the *sukūk* to the securitised assets.

642. In many jurisdictions, including some in which *sukūk* issuances may take place, there may be legal obstacles to setting up an appropriate type of SPE which can meet the conditions for the fiduciary responsibilities on behalf of *sukūk* investors. In such legal environments, it may not be possible to transfer legal title in the underlying assets to the investors, or to ensure that the investors are able to exercise these rights (e.g. to repossess *ijārah* assets) in the event of default. In these circumstances, a right of beneficial ownership through a trust over the assets is typically created. Such cases can arise, among others, in the *sukūk* issued by some sovereigns and national monetary authorities where the laws applicable in the jurisdiction restrict the legal transfer of national assets to certain types of investors – for example, those based in other jurisdictions. In some common law jurisdictions, the transfer of legal ownership is not a regulatory requirement given that such jurisdictions recognise the transfer of beneficial ownership.¹⁵³ These asset-based *sukūk* commonly involve a repurchase undertaking¹⁵⁴ from the obligor,

¹⁵¹ Basel II defines a traditional securitisation (in conventional finance) as a structure where the cash flow from an underlying pool of exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of credit risk. Payments to the investors depend upon the performance of the specified underlying exposures, as opposed to being derived from an obligation of the entity originating those exposures. In contrast, *sukūk* securitisation may or may not involve issuance of various tranches of *sukūk*.

¹⁵² In the case of conventional securitisation, the receivables sold to the SPV will usually arise from loans, leases, rentals, trade or credit card debts and any associated collateral rights – for example, personal and proprietary security such as guarantees, mortgages and pledges. The purpose of the SPV is to acquire receivables and any associated collateral rights from an originating institution.

¹⁵³ In cases where there is no transfer of legal title of the assets to the *sukūk* holders, there should be a sale contract that fulfils all the Sharī’ah conditions and requirements, such as identification of securitised assets. Likewise, the effects of a valid sale contract should be reflected, such as recognition/recording of profits and losses related to the sale of assets. The SPE should also be able to protect the rights of the *sukūk* holders. In this case, in order to mitigate the risk of the originator’s sale of securitised assets to a third party, the *sukūk* issuer may request the originator to pledge the securitised assets for its benefit.

¹⁵⁴ A repurchase undertaking (unilateral binding promise to buy the assets) is issued by the originator to the issuer/trustee that it will purchase the *sukūk* assets at a future date or on the occurrence of certain events such as maturity of the *sukūk* or the exercise of an early redemption right by the *sukūk* holders. Where a repurchase undertaking exists, investors have a credit exposure to the corporate or sovereign entity providing the undertaking.

due to non-transferability of legal title. In such a case, the credit risk of the *sukūk* is that of the originator, subject to any Sharī`ah-compliant credit enhancement.

643. *Sukūk* securitisation involves the following steps:

- a. origination of assets (in conventional finance, these are normally loans or other receivables, while in Islamic finance they are Sharī`ah-compliant assets such as the subject matter of *ijārah* or partnership interests in *mushārah* or *muḍārabah*);
- b. transfer of the assets to an SPE, which acts as the issuer by packaging them into securities (*sukūk*); and
- c. issuance of the securities to investors.

644. Asset-based *sukūk* can also be issued by a separate issuing entity that purchases the underlying assets from the originator, packages them into a pool and acts as the issuer of the *sukūk*. This issuing entity may require the originator to give the holders recourse that should comply with Sharī`ah rules and principles. The issuing entity can, however, provide Sharī`ah-compliant credit enhancement by repayment undertaking, in the event of default by the originator, through a Sharī`ah-compliant financing mechanism to *sukūk* holders. This credit enhancement provides the *sukūk* issuance with the credit rating of the (high-rated) issuer and thus enables it to achieve an investment-grade credit rating.

6.2.2 Parties in a Sukuk Structure

645. From a capital adequacy perspective, the parties in a securitisation structure include the originator, the issuer and the investors, in addition to which the following may be involved: an institution that acts as manager of the issuance; a servicer to service the underlying assets;¹⁵⁵ one or more credit-rating agencies to rate the securities (*sukūk*); an investment banker to act as an advisor or to place the securities with investors; and (in some *sukūk* securitisations) an institution that acts as a provider of credit enhancement.¹⁵⁶

646. An IIFS may act as *originator* of *sukūk* issues in any of the following cases:

- a. The ownership of assets held by the IIFS is transferred to holders of *sukūk* by means of a securitisation. Such a securitisation may offer the IIFS one or more of the following benefits:

This gives rise to the risks of (a) the enforceability or strength of the repurchase undertaking in the jurisdiction, and (b) the priority of the *sukūk* in the capital structure of the originator. Also see section 6.2.4 for Sharī`ah requirements on repurchase undertaking.

¹⁵⁵ Depending on the structure of the *sukūk* securitisation, a servicer may perform different functions for management of the underlying assets in the *sukūk* – for example, to collect payment, handle related taxes, manage escrow accounts and/or remit payments.

¹⁵⁶ See [section 5.3](#) for details.

- i. increased liquidity, since a relatively illiquid asset (such as an asset held as lessor in an *ijārah* or *ijārah muntahia bittamlīk*) is converted into cash paid by the investors in the *sukūk* subscription; and
- ii. reduced capital requirements, in so far as the securitisation may permit the IIFS to exclude the assets from the calculation of its RWAs.

The achievement of reduced capital requirements will depend on the way in which the securitisation is structured. For this, the IIFS must be able to derecognise all or most of the exposures relating to the assets from its balance sheet, according to the criteria for derecognition set out in [section 6.2.9](#).

- b. An IIFS may act as sponsor of a *sukūk* issuance or similar programme involving assets of a customer in which the IIFS manages or acts as advisor to the programme, places the *sukūk* into the market, or provides liquidity and/or credit enhancements. In this case, the benefit to the IIFS would be the earning of fees for the services provided.

647. In a securitisation structure, the role of servicer consists of, inter alia, collecting payments on behalf of the investors and passing them on to the latter, when this function is not carried out by the issuer. In the case of *ijārah* or IMB assets, the lessor is legally responsible for maintaining the assets in such condition that the lessee is not deprived of the full usufruct of the assets, which involves responsibility for basic maintenance, *takāful*, and so forth. This function is performed on behalf of the *sukūk* holders by the servicer, but the originator may act as servicer.

6.2.3 Collateral Security Structure

648. Consideration of the collateral security structure¹⁵⁷ is a critical factor; it needs to be the subject of legal opinions and is subject to Sharī'ah permissibility (in the case of perfectibility¹⁵⁸). Those security interests must be the first priority (there can be no prior or subsequent claims) and be perfected (or perfectible).

649. The legal opinions must address the nature of the security interest, the enforceability of the security interest against third parties, and perfection requirements (such as notices, registration and recordation). The effects of bankruptcy on perfection

¹⁵⁷ Collateral security structure is mainly used in *sukūk* based on Sharī'ah-compliant project financing.

¹⁵⁸ In legal terminology, perfection relates to the additional steps required to be taken in relation to a security interest in order to make it effective against third parties and/or to retain its effectiveness in the event of default by the grantor of the security interest. Depending on the legal system in the jurisdiction, collateral security may be perfected by some kind of notice, registration or filing.

must also be considered and opined upon. Major issues related to *sukūk* based on collateral security interest and related perfection include the following:

- a. *Rahn* (mortgage or other pledge of assets) concepts in certain jurisdictions are possessory in nature. This makes perfection a particularly difficult opinion issue in these jurisdictions.
- b. In many jurisdictions, and without regard to *rahn* concepts, perfection and priority regimes are not well developed.
- c. Bankruptcy laws and regimes may also not be well developed in some jurisdictions.

6.2.4 Characteristics of True Sale and Repurchase of Assets

650. *Sukūk* are issued based on securitisation of assets where the originator transfers the assets via an SPE to *sukūk* investors and the latter have a legally recognised asset ownership interest. For such transfer of assets to hold legally, there must be an agreement that is evidence of a binding sale transaction from the originator to the *sukūk* investors; that is, such a contract must be valid, binding and legally enforceable on all parties involved. With this sale transaction, the investors will become legal owner of the assets underlying the *sukūk* transaction, with all of the rights and obligations that accompany actual ownership. The SPE must be "bankruptcy remote" from the originator. Thus, upon the insolvency of a *sukūk* originator, the underlying assets cannot be clawed back into the bankruptcy estate of the originator. The *sukūk* holders of such issuance do not have recourse to the originator; their only recourse is to the underlying assets.

651. From a juristic perspective, subject to jurists' interpretations in the jurisdiction, there are four key criteria for a transaction to be considered as a "true sale" that transfers legal title to the SPE for the benefit of the *sukūk* investors:

- a. The transfer must be such that it cannot be recharacterised by a court or other body as a secured loan, or otherwise be avoided in a bankruptcy or insolvency proceeding involving the originator of the assets (such as pursuant to a fraudulent transfer in anticipation of bankruptcy or a preference payment).
- b. The bankruptcy or insolvency of the originator should not affect the assets that have been transferred to the issuer/SPE. This, in turn, means that the issuer will be able to enforce collection and other rights against the source of the income (the payer) without hindrances resulting from the bankruptcy or insolvency of the originator.
- c. The transfer must then be perfectible at the election of the issuer.

d. The sale must be free and clear of all prior overriding liens.

652. In the case of *sukūk* meeting the criteria for "true sale" to the SPE, the risk of principal repayment depends on the performance of the underlying assets and not on any other mechanism that ensures principal or profit repayment, such as a "repurchase undertaking" provided by the originator to the investors. Similarly, the payment of income to the investors depends on the asset performance instead of any obligation of the originator. Effectively, this means that in the event of the originator's insolvency, the *sukūk* holders continue to retain the ownership of the underlying assets, and cash flows will continue to be paid to the investors.

653. According to Sharī'ah rules and principles as generally understood, it is not permissible for the *muḍārib* (investment manager), *sharik* (partner) or *wakīl* (agent) to undertake in advance to repurchase the assets at maturity from *sukūk* holders or from one who holds them, for their nominal or par value. It is, however, permissible to undertake the purchase on the basis of the net value of assets, their market value, fair value or a price to be agreed at the time of purchase. In the event of negligence or misconduct by the *sukūk* manager (i.e. *muḍārib*, *sharik* or *wakīl*), it is required that the *sukūk* manager be liable to guarantee the payment of capital to *sukūk* holders, at the nominal or par value. It is also permissible for a lessee (i.e. the originator) in an *ijārah sukūk* to undertake to purchase the leased assets at maturity for their nominal value, provided the lessee is not also a *sharik*, *muḍārib* or *wakīl*.

654. A *mushārah* structure may be used to acquire asset ownership by setting up a venture (*mushārah*) jointly owned by the *sukūk* investors and the originator/issuer. Thus, it represents the direct proportionate ownership shares of the holders in the assets of a private commercial enterprise or a project. The investor's subscription money may be used to purchase non-liquid or fixed assets such as real estate or movable assets, whereas the originator/issuer can contribute specific assets or management skills. In order to cover risks related to the *mushārah* venture, this structure may use repurchase undertaking subject to meeting the criteria mentioned in paragraph 653.

6.2.5 Special-Purpose Entity

655. A special-purpose entity is a legal entity that is created solely for a particular financial transaction or series of transactions. The SPE may take the form of a limited partnership, limited liability company, trust, corporation or collective investment fund, or be established under a special law if such a law is SPE-enabling. The establishment of an SPE vehicle or conduit is required to house the assets transferred by the originator and to issue *sukūk*

based on such assets.¹⁵⁹ The SPE then serves as an intermediary between the originator and the *sukūk* investors.

656. In *sukūk* structures, the SPE is established as a "bankruptcy-remote" independent entity, company or trust so that following a "true sale" of the securitised assets to the SPE, the assets cannot be clawed back by the liquidator of the originator in the event of its liquidation.

657. In conventional securitisations, the SPE is a company or trust or other legal entity having no other business. In a *sukūk* securitisation, the SPE can be organised, for example, as a *mushārah*, *muḍārah* or *wakālah*, where, nonetheless, the requirement of SPE having no other business continues to apply. In the former two cases, there is a partnership contract with financial participation by the *sukūk* investors. In the case of a *muḍārah* structure, only the *sukūk* investors participate with money as *rabb al-māl*, while the other party (i.e. the SPE) acts as the manager (as *muḍārib*) of the securitised assets. In the case of *wakālah*, the SPE as an agent (*wakīl*) acts as the manager of assets on behalf of the *sukūk* investors.

658. A general-purpose or operating company (as opposed to an SPE) is not appropriate for holding the securitised assets, as such a company might have other assets and other liabilities, each of which would be likely to interfere with the exclusivity of the *sukūk* investors' rights over the securitised assets.

659. The SPE is a legal entity which has a legal status that makes it bankruptcy-remote from the originator. By its very nature, it is a legal shell with only the specific assets transferred by the originator, and those assets are effectively owned by the *sukūk* investors, legally or via a trust, there being nothing else in the vehicle in which any other party could have an interest. Such an SPE cannot be consolidated with the originator for tax, accounting or legal purposes, as that would affect its bankruptcy-remote position.

6.2.6 Credit Enhancement

660. *Sukūk* can be "credit enhanced" to raise their credit quality above that of the underlying asset pool. Credit enhancement is therefore intended to reduce the credit risk to the *sukūk* investors and reduce the funding cost of the originator. It also results in the *sukūk* having an enhanced credit rating by the ECAI. Subject to Sharī'ah permissibility, the mechanisms used in credit enhancement may include, inter alia, those discussed below.

¹⁵⁹ As mentioned in section 5.2.1, there may be some obstacles to setting up an appropriate type of SPE in certain jurisdictions, which can meet the conditions for the fiduciary responsibilities. In that case, the *sukūk* structure would not involve an SPE.

6.2.6.1 Over-collateralisation

661. Subject to Sharī'ah approval of the structure, an originator may retain a small equity share in a pool of securitised assets in order to provide over-collateralisation. For example, the originator of a securitisation of a pool of *ijārah* lease assets might securitise 90% of the pool and retain 10% as an equity position (first loss position) – that is, a residual claim. The *sukūk* holders would be entitled to income based on 90%, and the originator, based on the remaining 10%, of the rental income from the pool.

6.2.6.2 Excess spread

662. Excess spread is the difference between (a) the expected periodic net income from the securitised assets (i.e. the income after expenses such as servicing fees and operating fees have been paid) and (b) the periodic amounts payable to the *sukūk* investors. Subject to Sharī'ah approval, excess spread may be built into a *sukūk* structure such that the issuer/SPE retains a certain percentage of the periodic net income if this is in excess of the target level of the periodic payments to the *sukūk* holders, and holds this amount in an excess spread reserve. If the net income falls below the level required to meet the target level of the payments to the *sukūk* holders, the issuer/SPE may release an amount from the excess spread reserve in order to make good the shortfall in whole or in part.¹⁶⁰

6.2.6.3 Cash collateral

663. Cash collateral is a segregated trust account, funded at the time when a new series of *sukūk* is issued, that can be used to cover shortfalls in payment of coupons, principal or servicing expenses if the excess spread falls below zero. The account can be funded by the issuer, but is most often generated by a *qard* from the originator or another third party. Commonly, the pooling and servicing agreements dictate the amount of the cash collateral, which is typically based on a specified percentage of the *sukūk* issued. The amount in the cash collateral account can be invested in the high-rated *sukūk* to generate profits during the period.

6.2.6.4 Takāful protection

664. It is possible that *takāful* cover may be provided by a third-party *takāful* undertaking against losses due to defaults (i.e. in *ijārah sukūk*, non-payment of rentals or redemption price by the originator/lessee) or ratings downgrades of *sukūk*.¹⁶¹

¹⁶⁰ This mechanism is comparable to the "profit equalisation reserve" commonly used by IIFS to "smooth" the profit payouts to investment account holders.

¹⁶¹ Such *takāful* protection would not resemble credit default swaps in any way. The *takāful* participants would be required to have the credit exposures being covered (an "insurable interest").

6.2.6.5 Classification of credit enhancement

665. The credit enhancement in a *sukūk* structure can be provided by an "internal" mechanism such as by the issuer of the *sukūk* structure or by an "external" arrangement such as a third-party guarantee. These credit enhancement structures are explained in the following:

- a. *Issuer-provided credit enhancement structure (the SPE)*: This structure comprises credit support where a part of the credit risk of the asset pool is assumed by the issuer.
- b. *Third-party guarantee credit enhancement structure*: This structure comprises the assumption of credit risk by parties other than the issuer. The guarantor does not have the right of recourse to the originator, and the guarantee can be for a fixed period and for a limited amount, without any consideration being received by the guarantor. However, a claim should first be made against the underlying assets, and then against the guarantor, unless an option is provided to make the claim otherwise.

6.2.7 Credit Rating

666. Under securitisation, the *sukūk* investors are not concerned with the credit strength of the issuing entity or the originator except for the quality of the originated portfolio. Essentially, the ECAI are concerned with the quality of the underlying pool of assets and the robustness of the structure. The most important concerns of an ECAI while assigning a rating are the quality of the asset portfolio, solvency of the issuer or the originator, perfection of the legal structure, tax risks, clean and prior title to the securitised portfolio, risks of set-off and prepayment, etc. A change in the rating for a *sukūk* issue may be due to deterioration in the performance of the collateral, heavy utilisation of credit enhancement or downgrade of a supporting rating – for example, a *takāful* company that was underwriting *takāful* on the pool of the assets. In those *sukūk* structures where legal transfer of assets has not taken place due to the reasons mentioned in [section 6.2.1](#), the rating will depend on a composite view of the strength of the rating of the issuer or the originator and the quality of the asset pool.

6.2.8 Assets in Sukuk Structures

667. The assets in a *sukūk* securitisation have to be in compliance with Sharī'ah rules and principles. Islamic finance typically relates finance to assets or equity interests, and the concept of payments of income and nominal value being derived from Sharī'ah-

compliant sources (non-financial assets or equity interests) is prevalent in Islamic structured transactions. All *sukūk* returns and cash flows should be linked to assets purchased or (in the case of project finance) those generated from an asset once constructed. Therefore, originators wishing to raise financing through *sukūk* are required to utilise Sharī'ah-compliant assets in the structure.

668. For an IIFS, the underlying assets to be securitised may include, inter alia, *ijārah* leased assets, *murābahah* or *salam* receivables, *istisnā'* assets or equity ownership (*mushārahah* or *muḍārahah*) according to Sharī'ah rules and principles. In certain jurisdictions, the *sukūk* may also be based on a portfolio of underlying assets comprising different categories. Use of such a portfolio allows for a greater mobilisation of funds, as a certain proportion of *murābahah* or *salam* assets that do not meet Sharī'ah criteria for tradability (being classed as receivables) can be combined in a portfolio with *ijārah* assets and/or with *mushārahah* or *muḍārahah* assets that are classed as non-financial.

669. Thus, while *sukūk* based on financial assets are not tradable, the latter may be combined in a pool with non-financial assets that can act as a basis for tradable *sukūk*,¹⁶² provided the proportion of non-financial assets (neither debt nor cash) in the pool is not less than a certain acceptable minimum ratio, in accordance with Sharī'ah rules and principles.

670. Business ventures organised as *mushārahah* or *muḍārahah* partnerships may also be securitised, and the resultant *sukūk* are tradable. Where such *sukūk* are held by an IIFS until maturity and are unrated, the provisions of "equity position risk in the banking book" are applicable.

6.2.9 Operational Requirements for Recognition of Risk Transference (Asset Derecognition Criteria)

671. An originating IIFS may exclude securitised exposures from the calculation of risk-weighted assets for capital adequacy purposes and consider the transaction as a *sukūk* or securitisation exposure only if all of the following conditions have been met. IIFS meeting these conditions must yet hold regulatory capital against any exposures that they retain in respect of the securitisation (such as credit enhancements).

- a. Substantially all credit risks (and price risk, where applicable) associated with the underlying securitised exposures has been transferred to third parties (i.e. the SPE

¹⁶² These *sukūk* are sometimes termed "*sukūk al-Istithmar*".

- or issuer).
- b. The originating IIFS does not maintain effective¹⁶³ or indirect control over the transferred exposures. The exposures are legally isolated from it by way of a true sale (refer above) in such a way that the exposures are put beyond the reach of the originating IIFS and its creditors, even in bankruptcy or receivership. An originating IIFS must seek and obtain from a qualified legal counsel a legal opinion that confirms true sale. The securitised assets held by the issuer will not be consolidated with the assets of the originator or the issuer's parent in a bankruptcy or insolvency of any of those entities.
 - c. Holders of the *sukūk* (investors) may have a claim only on the underlying pool of assets. The *sukūk* issued must not in any way be obligations of the originating IIFS.
 - d. The immediate transferee is an SPE, and the holders of the legal and beneficial interests in that entity have the right to pledge or exchange such interests without restriction.
 - e. Clean-up calls¹⁶⁴ in *sukūk* and securitisation transactions must satisfy the following conditions:
 - i. the exercise of the clean-up call must not be mandatory, in form or in substance, but rather must be at the discretion of the originating IIFS;
 - ii. the clean-up call must not be structured to avoid allocating losses to credit enhancements or positions held by investors or otherwise structured to provide credit enhancement; and
 - iii. the clean-up call must only be exercisable when 10% or less of the purchase consideration for the underlying assets (e.g. in an IMB) remains to be paid. The issuer's rights to make clean-up calls, and the terms on which they are made, are subject to Sharī'ah approval.
 - f. The securitisation does not contain clauses that (i) require the originating IIFS to alter

¹⁶³ The originating IIFS is deemed to have maintained effective control over the transferred credit risk exposures if it: (i) is able to repurchase from the SPE any exposures in the securitisation pool in order to realise their benefits; or (ii) is obligated to retain the risk of the transferred exposures. The retention of servicing rights to the exposures by the originating IIFS will not necessarily constitute indirect control of the exposures.

¹⁶⁴ A clean-up call is an option that permits the securitisation exposures to be called before all of the underlying exposures or securitisation exposures have been repaid. It is generally accomplished by repurchasing the remaining securitisation exposures once the pool balance or outstanding securities have fallen below some specified level.

the underlying exposures such that the pool's credit quality is improved unless this is achieved by selling exposures to independent and unaffiliated third parties at market prices; (ii) allow for increases in a retained first-loss position or credit enhancement provided by the originating IIFS after the transaction's inception; or (iii) increase the yield payable to parties other than the originating IIFS, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the underlying pool.

- g. There must be no termination options/triggers except eligible clean-up calls, termination for specific changes in tax and regulation or early amortisation provisions which result in the *sukuk* failing the operational requirements set out in this paragraph.

672. In order to comply with Sharī'ah rules and principles, the structure must transfer all ownership rights in the assets from the originator via the issuer to the investors. Depending on the applicable legal system, these ownership rights do not necessarily include registered title.¹⁶⁵ The transfer could be a simple collection of ownership attributes that allow the investor (a) to step into the shoes of the originator, and (b) to perform (sometimes via a servicer) duties related to ownership. The transfer could also include rights granting access to the assets, subject to notice, and, in the case of default, the right to take possession of the assets.

673. The transfer raises questions of whether one transfers (a) the control of assets, and (b) substantial risks and rewards of ownership of the assets. As explained in [section 6.2.4](#), for the purpose of tax, accounting and/or regulation, the derecognition of the assets from the originator's balance sheet relies on a "true sale", meaning that the economic value of assets has been transferred from one party to another in a way that prevents the creditors or liquidator of the seller from claiming the assets from the buyer, thus creating "bankruptcy remoteness" for the assets. The question whether legal isolation has been achieved is to be judged by best practice standards. Differences in legal systems are to be taken into account in making this judgment.

674. *Sukuks* or securitisation transactions that include a clean-up call that does not meet all of the criteria stated in paragraph 672 result in a capital requirement for the originating bank. For a traditional securitisation, the underlying exposures must be treated as if they were not securitised. Additionally, banks must not recognise in regulatory capital any gain on sale. If a clean-up call, when exercised, is found to serve as a credit enhancement, the

¹⁶⁵ In most jurisdictions, however, legal systems require some kind of notice, registration or filing to "perfect" the ownership of the underlying assets.

exercise of the clean-up call must be considered a form of implicit support provided by the IIFS and must be treated in accordance with the supervisory guidance pertaining to securitisation transactions.

675. In the case of bankruptcy remoteness, subject to the legal framework in the jurisdiction, the conditions include the following:

- a. If there were a bankruptcy of the issuer, the assets of the issuer would be distributed in accordance with the law or a court order, rather than in accordance with the contractual arrangements involving the issuer.
- b. Separateness covenants will be required to ensure bankruptcy remoteness (as well as non-consolidation).
- c. Another provision to ensure bankruptcy remoteness relates to non-competition and bankruptcy declarations. The originator, investors, credit enhancers and others agree in the transaction documents not to initiate involuntary bankruptcy proceedings against the issuer. The issuer also provides, in both its constitutive documents and the transaction documents, not to initiate voluntary bankruptcy proceedings. The parties should seek a legal opinion from jurists in the jurisdiction concerned and ensure that these types of agreements and warranties are legally valid and enforceable.

6.2.10 Operational Requirements for Credit Analysis

676. IIFS are required to carry out the credit analysis of their securitisation exposure based on the following criteria, so as to use the risk weights suggested in section 6.2.12. If an IIFS is unable to perform the due diligence and maintain the information specified in the following, it will be required to deduct the securitisation exposure from its regulatory capital. The criteria will be applicable to securitisation exposures of IIFS both in the banking and trading book.

- a. An IIFS should have a clear understanding of the nature and features of its individual securitisation exposures, including the risk characteristics of the pools underlying such exposure on an ongoing basis. This requirement applies to both on- and off-balance sheet securitisation exposures.
- b. As the payments to *sukūk* holders are dependent on the performance of underlying assets, an IIFS should be able to assess the performance information on an ongoing basis.

- c. An IIFS should be able to thoroughly understand all the structural features of a *sukūk* that can materially impact the performance of its exposures to the transaction. Such exposures may include credit enhancements, liquidity enhancements, triggers, and deal-specific default definitions.

6.2.11 Treatment for Regulatory Capital Purposes for Sukūk and Securitisation Exposures

677. In conventional securitisations, it is common to have a structure in which the cash flows from an underlying pool of assets are used to service at least two different stratified risk positions or *tranches* reflecting different degrees of credit risk. Junior securitisation tranches can absorb losses without interrupting contractual payments to more senior tranches. A key objective of such structures is credit enhancement for the senior tranche, such that it achieves at least an investment-grade credit rating.¹⁶⁶

678. Apart from being a holder of *sukūk* (which exposes an IIFS to various credit and market risks of the *sukūk*), an IIFS may act in various capacities in a *sukūk* securitisation and hence be exposed to risks that may be similar to those in a conventional securitisation. However, Sharī'ah rules and principles may add an extra dimension to the existing risk exposures and may have a material effect on the risk profile of *sukūk* holders.

679. When referring to securitisations, it is customary to use the term “exposures” to refer to either (the credit risk of) assets involved in the securitisation, or to other exposures such as those resulting from credit enhancements or those from acting as sponsor, issuer or servicer. In Islamic finance, in addition to credit risk, there may be other exposures attaching to certain asset categories.

680. Since securitisations may be structured in many different ways, the capital treatment of a securitisation exposure must be determined on the basis of the economic substance rather than the legal form of the securitisation structure. Similarly, supervisors will look to the economic substance of a transaction to determine whether it should be subject to the securitisation framework for purposes of determining regulatory capital. IIFS are encouraged to consult with their national supervisors when there is uncertainty about whether a given transaction should be considered a securitisation.

681. One key issue for IIFS is the extent to which the exposures or obligations attaching to the underlying assets have been effectively transferred to the *sukūk* holders.

¹⁶⁶ Conventional securitisations are categorised as either *traditional* or *synthetic*. In a traditional securitisation, payments to the investors depend on the performance of the specified underlying exposures, as opposed to being derived from an obligation of the entity originating those exposures. In a synthetic securitisation, the credit risk of an underlying pool of exposures is transferred, in whole or in part, through the use of credit derivatives or guarantees that serve to hedge the credit risk of the exposures by transferring significant credit risk to investors as holders of the securities.

A related issue is whether any types of risk other than credit risk need to be considered, such as price risk in the context of a securitisation where the underlying asset is a *salam* or *istisnā`* asset.

682. While it is clear that the tradability of *sukūk* is often a key issue, and is of fundamental importance if an IIFS is acting as a sponsor of a securitisation programme involving assets of a customer, it is emphasised that Sharī`ah criteria for being tradable are unrelated to the capital treatment of the underlying assets by the originator.

683. The rating of *sukūk* must be from an eligible ECAI as recognised by the IIFS's supervisory authority, and must take into account the entire amount of the credit exposure of the IIFS with regard to all amounts owed to it. Where Sharī`ah requirements can materially affect the credit risk, these will be considered.

684. When an IIFS is required to deduct a securitisation exposure from its capital, the deduction will be equivalent to a risk weight of 1250% if the minimum capital requirement is 8%. Deductions from capital may be calculated net of any specific provisions taken against the relevant securitisation exposures.

6.2.12 Capital Requirements for Sukūk

685. This section sets out the approach and the methodology for the determination of minimum capital requirements to cover the credit risk and market risk arising from the holding of *sukūk* in the "banking book" by an IIFS. The approach to capital requirements for securitisation exposures set out is based on the standardised approach. This is consistent with the intentions of the BCBS, which requires an IIFS to apply the standardised approach if the IIFS applies the SCRA for the asset classes which form the underlying pool of exposures for the securitisations. This section also provides specific approaches to deal with the risk exposures associated with various commonly used *sukūk* structures. RSAs also have discretion to specify measurement approaches as they deem fit for other types of *sukūk* which are not listed in this subsection, provided they are approved by a relevant Sharī`ah board. For unrated *sukūk* that use a combination of more than one of the Sharī`ah-compliant contracts outlined below, the capital requirement will be calculated taking into account the risk implications of the overall structure.

686. As, in principle, *sukūk* are externally rated, the relevant risk weight will be based on the ECAI ratings in accordance with the standardised approach covered in this Standard. It is implied that ECAI has taken into account the structure and other features

of *sukūk* while suggesting the ratings. Where there are no acceptable ECAI ratings,¹⁶⁷ the risk weights will be determined on the basis of the underlying assets as set out below, which may involve market risk as well as credit risk.

687. Though the risk weights suggested in the following are based on an acceptable ECAI rating, an IIFS should have methodologies that enable it to assess the credit risk involved in securitisation exposures at individual and portfolio levels. An IIFS should assess exposures, regardless of whether they are rated or unrated, and determine whether the risk weights applied to such exposures, under the standardised approach, are appropriate for their inherent risk. In those instances where an IIFS determines that the inherent risk of such an exposure, particularly if it is unrated, is significantly higher than that implied by the risk weight to which it is assigned, the IIFS should consider the higher degree of credit risk in the evaluation of its overall capital adequacy.

688. As a general rule, an IIFS must, on an ongoing basis, have a comprehensive understanding of the risk characteristics of its individual securitisation exposures, whether on- or off-balance sheet, as well as the risk characteristics of the pools underlying its securitisation exposures. This is an essential prerequisite for an IIFS to use the securitisation framework. The IIFS must assign a 1250% RW to any securitisation exposure for which it cannot perform the required level of due diligence.

689. As part of the due diligence referred to above in paragraph 676 IIFS must be able to access performance information on the underlying pools on an ongoing basis in a timely manner. Such information may include, as appropriate: exposure type; percentage of financing 30, 60 and 90 days past due; default rates; prepayment rates; exposure in foreclosure; property type; occupancy; average credit score or other measures of creditworthiness; average financing-to-value ratio; and industry and geographical diversification. A bank must also have a thorough understanding of all structural features of a *sukūk* or securitisation transaction that would materially impact the performance of the 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.

690. Regulatory capital is required for all the securitisation exposures of an IIFS, including those arising from the provision of credit risk mitigants to a securitisation transaction, investments in asset-backed securities, retention of a tranche, and extension of a liquidity facility or credit enhancement, as set forth in the following sections. Repurchased

¹⁶⁷ "Unacceptable ratings" refers to either the *sukūk* being unrated or the rating of the *sukūk* not being acceptable to the supervisory authority.

securitisation exposures must be treated as retained securitisation exposures.

691. An IIFS must be required to deduct from its CET 1 capital any increase in equity capital resulting from a securitisation transaction, such as that associated with expected future margin income resulting in a gain on sale.

692. General or specific provisions against securitisation exposures or underlying assets still held on the balance sheet of the originating IIFS must not be included in the measurement of eligible provisions. However, originating IIFS can offset 1250% risk-weighted *sukuk* or securitisation exposures by reducing such exposure amount by the amount of their specific provisions on underlying assets of that transaction. Specific provisions on *sukuk* or securitisation exposures will be taken into account in the calculation of the exposure amount, while general provisions on underlying securitised exposures are not to be taken into account in any calculation.

693. The risk-weighted asset amount of a securitisation exposure must be computed by multiplying the exposure amount by the appropriate risk weight determined in accordance with the approaches described in this section. For an exposure to a *sukuk* or a securitisation with a pool of underlying assets, the risk-weighted asset amount must be determined in accordance with the SCRA approach described in detail in Section 4 of this Standard for the sum of the exposure amounts of the underlying assets in the *sukuk* or securitisation pool. This risk-weighted asset amount for exposure to the *sukuk* or securitisation must be multiplied by 8% to calculate the weighted average capital charge for that *sukuk*/securitisation exposure. This calculation should reflect the effects of any credit risk mitigant that is applied to the underlying exposures (either individually or to the entire pool), and hence benefits all of the securitisation exposures.

694. IIFS may be permitted by RSAs to apply a “look-through” approach to the exposures underlying a *sukuk* or securitisation exposure, whereby such an exposure could receive a maximum risk weight equal to the exposure weighted-average risk weight applicable to the underlying exposures, provided that the IIFS is confident of being aware of the composition of the underlying exposures at all times.

695. For *sukūk* classified in the trading book, the market risk capital requirement as mentioned in [section 5.4.3](#) on market risk is applicable.

6.2.13 Salam Sukūk

696. *Salam sukūk* represents proportionate ownership of the capital of a *salam* transaction, where the *salam* capital is constituted by an advance payment to a counterparty as supplier of a commodity (the subject matter) to be delivered at a future

date. This type of *sukūk* is generally considered to be non-tradable, since the subject matter is considered to be a financial asset (a receivable). The gross return to the *sukūk* holders consists of the margin or spread between the purchase price of the subject matter and its selling price following delivery. In certain *sukūk* issues, a third party gives an undertaking that the subject matter will be sold at a price exceeding the purchase price by a specified margin. This may be achieved by means of a parallel *salam* transaction in which a third party purchases the subject matter for delivery on the same delivery date as in the original *salam* contract.

697. The credit risk in *salam sukūk* is similar to that of the underlying *salam* contract, where the credit risk exists upon the subscription of the *sukūk* until the delivery and sale of the subject matter. As such, the risk weight is based on the counterparty (*salam* supplier) unless the *salam* capital is guaranteed by a third party, in which case the risk weight is that of the guarantor if lower than that of the supplier. The risk weight is 100% for an unrated counterparty (*salam* supplier) or guarantor when the *salam* capital is guaranteed by a third party.

698. The market risk in *salam sukūk* (in the absence of a parallel *salam* contract or other hedge) is likewise the same as that of the underlying contract – namely, a long position in the underlying commodity. This risk can be measured according to either the maturity ladder approach or the simplified approach, as set out in [section 4.2.6.4](#) (commodities and inventory risk).

699. A *salam sukūk* issuance which is structured with an undertaking from the issuer that the underlying commodity will be sold to a third party at a specified selling price (by means of a parallel *salam* contract) shall carry the risk weight of the buyer of that underlying commodity in the parallel *salam* contract.¹⁶⁸

6.2.14 *Istisnā` Sukūk*

700. *Istisnā` sukūk* represent proportionate shares in the financing of a project to construct an asset at a price to be paid in future instalments, the total of which equals the total face value of the *sukūk*, in addition to mark-up. The *sukūk* can be in the form of serial notes or certificates with different maturity dates that match the progress schedule of instalments as agreed between the *sukūk* issuer (as manager on behalf of the *sukūk*

¹⁶⁸ For this type of *salam sukūk*, there is no capital charge for market risk that consists of basis and forward gap risks (namely, the risk that the hedge may be impaired because the underlying commodity delivered may be of inferior quality or may be delivered later than the contractual date) as the underlying commodity is normally traded on an exchange that eliminates the risk of late/non-delivery or delivery of a commodity of inferior quality.

investors) and the construction firm. It is allowed to trade in *istisna sukūk* in cases where the funds have been utilised to build or construct the assets for the *sukūk* holders during the *istisna* period. In the case of parallel *istisna*, if the value of *istisna* is being paid in cash or the assets have already been delivered to the buyers, then tradability of such *sukūk* will be subject to the rules of dealing with debt. The subject matter in *istisna sukūk* is considered to be a non-financial asset (WIP inventory).

701. The asset may be constructed on behalf of an ultimate customer or off-taker with whom the IIFS enters into a parallel *istisnā`* contract. In this case, there is a credit risk exposure to the ultimate customer for the payment due under the parallel contract. This credit risk occurs upon commencement of the construction work by construction firm, until the whole amount or all the instalments (progress billings) are paid by the ultimate customer. The risk weight for this credit exposure is that of the ultimate customer, unless there is a guarantee, in which case the risk weight is that of the guarantor if lower.

702. The risk weight for *istisnā` sukūk* where there is no parallel *istisnā`* is based on that of the issuer, which is 100% for an unrated issuer, unless a third party provides a guarantee, in which case the third party's risk weight (if lower than that of the issuer) will be applicable. In addition, a risk weight of 20% will be added to cater for the price risk to which the underlying *istisnā`* is exposed. In the case of ECAI-rated *istisnā` sukūk*, the ECAI rating will apply.

703. In the event the returns to the *sukūk* holder are from the cash flow of the underlying assets, which fall under the category of "Exposure to Assets" *istisnā`*, the risk weight shall be based on the "supervisory slotting criteria" approach which carries risk weights of 70–250%.

704. Please refer to [section 4.4](#) on *istisnā`* for detailed treatment.

6.2.15 *Ijārah and IMB Sukūk*

705. *Ijārah* and IMB *sukūk* represent the holder's proportionate ownership in leased assets where the *sukūk* holders will collectively assume the rights and obligations of the lessor. The *sukūk* holders are entitled to a share of the lease rentals in proportion to their ownership shares in the leased assets. *Ijārah* and IMB *sukūk* are tradable from the issuance date, as the subject matter is a non-financial asset owned by the *sukūk* holders. As a proportionate owner, an *ijārah* or IMB *sukūk* holder assumes a proportionate share of any loss if the leased asset is destroyed, or of the cost of meeting the obligation to provide an alternative asset, failing which the lessee can terminate the lease without paying future rentals.

706. The risk weight for IMB rentals is based on the lessee's counterparty credit risk, since the residual value risk of the underlying asset is not borne by the *sukūk* holders. Please refer to [section 5.5](#) on *ijārah* and IMB for detailed treatment.

707. In the case of ECAI-rated *ijārah* and IMB *sukūk*, the ECAI rating will apply.

6.2.16 *Mushārahah Sukūk*

708. *Mushārahah sukūk* represent the direct proportionate ownership shares of the holders in the assets of a private commercial enterprise or project, where the subscription money is normally employed in purchasing non-liquid assets or assets such as real estate or movable assets. A *mushārahah sakk* is a profit- and loss-sharing instrument where the exposure is of the nature of an equity position in the banking book, except in the case of investments (normally short-term) in assets for trading purposes.

709. The capital treatment of *mushārahah sukūk* is based on the intent of the underlying investments in *mushārahah* that can be categorised as follows:

- a. *Private commercial enterprise to undertake trading activities in, for example, commodities*

The risk weight shall be based on the applicable underlying assets as set out in the market risk section of [section 4.2](#).

- b. *Private commercial enterprise to undertake business venture or project [other than (a)]*

The risk weight for equity position risk in respect of an equity exposure in a business venture or project is measured according to either the simple risk weight method or the supervisory slotting criteria approach.

- c. *Joint ownership of real estate or movable assets (such as cars)*

710. Income-producing *mushārahah* investments through leasing to third parties by means of *ijārah* shall carry the risk weight of the counterparty – that is, the lessee.

711. Income-producing *mushārahah* investments with *murābahah* subcontracts carry the risk weight of the *murābahah*. However, such *sukūk* are not tradable in most jurisdictions.

712. Please refer to [section 5.6](#) on *mushārahah* for detailed treatment.

6.2.17 *Muḍārahah Sukūk*

713. *Sukūk* holders subscribe to the certificates issued by a *muḍārib* and share the

profits and bear any losses arising from the *muḍārabah* operations. The returns to the holders are dependent on the revenue by the underlying investment.

714. The treatment of *muḍārabah sukūk* is based on the intent of the underlying investments in *muḍārabah*, which can be categorised as follows:

- a. *Private commercial enterprise to undertake trading activities in, for example, commodities*

The risk weight shall be based on the applicable underlying assets as set out in the market risk section in [section 4.2](#).

- b. *Private commercial enterprise to undertake business venture or project [other than (a)]*

The risk weight for equity position risk in respect of an equity exposure in a business venture or project is measured according to either the simple risk weight method or the supervisory slotting criteria approach.

715. In the case of ECAI-rated *muḍārabah sukūk*, the ECAI rating will apply.

716. Please refer to [section 5.7](#) on *muḍārabah* for detailed treatment.

6.2.18 *Wakālah Sukūk*

717. The *wakālah sukūk* holders provide the capital for Sharī'ah-compliant investment activity, and the investment agent (*wakīl*) undertakes investment of the funds. These *sukūk* entitle the holders to a return in proportion to their investment in the underlying assets and a right under a purchase undertaking to buy all or a proportion of the underlying assets if certain conditions are fulfilled.

718. The SPE acting as the principal on behalf of the *sukūk* holders appoints a *wakīl* to invest funds provided by the *sukūk* holders into a pool of investments or assets. The *wakīl* lends its expertise and manages those investments on behalf of the SPE for a particular duration, in order to generate a return for the benefit of the *sukūk* investors. The SPE and the *wakīl* enter into a *wakālah* agreement, which will govern the appointment, scope of services and fees payable to the *wakīl*, if any. While the *wakālah* structure has some similarities to the *muḍārabah* structure, the main difference is that unlike a *muḍārabah*, in which profit is divided between the parties according to certain ratios, *sukūk* holders via a *wakālah* structure will receive the return on the investments less the management fees payable to the *wakīl*. The tradability of such *sukūk* will be based on the underlying assets purchased by the *wakīl*.

719. In this type of *sukūk* structure, the portfolio of assets may comprise a broad range of Sharī`ah-compliant assets that will be selected by the *wakīl* for a period of time corresponding to the duration of the *sukūk*. The range of assets may include: Sharī`ah-compliant equities; Sharī`ah-compliant assets such as real estate and cars; *murābahah*, *istisnā`* or even other *sukūk*, etc.

720. The treatment of *wakālah sukūk* is based on the intent of the underlying investments in *wakālah*, which can be categorised as follows:

- a. *To undertake trading activities in foreign exchange, shares or commodities.*

The risk weight shall be based on the applicable underlying assets as set out in the market risk section in section 4.2.

- b. *To invest in assets that can be leased or sold on a murābahah basis*

Income-producing *wakālah* investments through leasing to third parties by means of *ijārah* shall carry the risk weight of the counterparty – that is, the lessee.

Income-producing *wakālah* investments with *murābahah* subcontracts carry the risk weight of the *murābahah*. However, such *sukūk* are not tradable in most jurisdictions.

- c. *To invest in a combination of assets comprising shares, leasable assets, receivables from murābahah or salam, etc.*

The risk weight shall be measured according to the percentage of assets allocated in the investment portfolio of *wakālah sukūk* based on (a) and (b), above.

721. In the case of ECAI-rated *wakālah sukūk*, the ECAI rating will apply.

722. Please refer to section 5.9 on *wakālah* for detailed treatment.

6.2.19 Murābahah Sukūk

723. In this case, the originator (and also, in some cases, the issuer) of the *sukūk* is the buyer (on credit) of the *murābahah* asset, the *sukūk* investors are the sellers (on credit) of that asset, and the credit provided by the *sukūk* investors and received by the issuer consists of the *murābahah* selling price of the asset, which the originator sells to obtain the funds it seeks. The *sukūk* holders own the *murābahah* and are entitled to receive payment of that receivable (the selling price of the asset) either in instalments or in a lump sum at the end of the *murābahah* contract. Such *sukūk*, being securitised receivables, are not

generally considered tradable in most jurisdictions.

724. The applicable risk weight shall be based on the standing of the obligor/issuer as rated by the ECAI. In cases where the obligor is unrated, a risk weight of 100% shall apply. If the *sukūk* structure involves funding of an asset purchase in foreign currency, the relevant exposure shall be calculated based on measures of foreign exchange risk described in [section 4.2.6.3](#) (foreign exchange risk).

725. Please refer to [section 5.1](#) on *murābahah* for detailed treatment.

6.2.20 Exclusions

726. For all those *sukūk* structures where legal transfer of assets has not taken place due to the reasons outlined in [section 5.2.1](#), the applicable risk weight shall be the credit risk weight of the originator, subject to any Sharī'ah-compliant credit enhancement by the issuer. The applicable credit risk weights are based on credit ratings issued by a recognised ECAI (see [section 4.1.4.1](#)). Similarly, *sukūk* which are issued by a sovereign shall carry the risk weight applicable to that sovereign, according to its respective rating as assigned by an ECAI that is approved by the supervisory authority. In some cases, a number of originators may form a pool to contribute assets in an asset-based structure (e.g. multiple sovereigns). In such cases, the rating of the *sukūk* will be that of the pool, subject to any Sharī'ah-compliant credit enhancement.

6.2.21 Capital Requirements where the IIFS is the Originator

Retained securitisation exposures

727. An IIFS taking the role of an originator is required to hold regulatory capital against all of its retained securitisation exposures, including those arising from the provision of credit risk mitigants to a securitisation transaction, investments in a securitisation originated by it, and extension of a liquidity facility or credit enhancement. Repurchased securitisation exposures must be treated as retained securitisation exposures.

728. The risk-weighted asset amount of a securitisation exposure is computed by multiplying the amount of the exposure by the appropriate risk weight. For off-balance sheet exposures, IIFS must apply a credit conversion factor and then risk-weight the resultant credit-equivalent amount. Please refer to [section 4.1.3.8](#) (off-balance sheet exposures).

729. The credit risk weights for the retained securitisation exposures where the IIFS is the originator are covered in paragraphs 732 to 737 in [section 6.2.23](#).

6.2.22 Treatment of Liquidity Facilities

730. The liquidity facilities in certain types of *sukūk* structures are commitments from the

facility provider to provide liquid funds if these are needed to meet contractual payments to *sukūk* holders and there is a delay between the date of their collection and the date on which the payment to the *sukūk* holders is due. The need for such facilities may result from a timing mismatch between cash collections from the underlying *sukūk* assets (such as *ijārah* rentals) and the scheduled payments due under the programme to the *sukūk* holders. In this context, it is assumed the liquidity facilities comply with Sharī'ah rules and principles and meet operational requirements for the eligibility of a *sukūk* liquidity facility set out by the national supervisory authority. The requirements may include requiring the facility documentation to identify clearly and limit the circumstances under which the facility may be drawn down. Subject to meeting such requirements, the proposed risk weight for liquidity facilities is set at a 50% CCF regardless of the maturity of the liquidity facility. However, if an external rating of the facility itself is used for risk-weighting the facility, a 100% CCF must be applied.

731. A servicer cash advance, based on *qard* (interest-free loan), is an advance granted by the servicer to the SPE to ensure timely payment to the investors¹⁶⁹ – for instance, in cases of timing differences between collection and payments.¹⁷⁰ However, it is a Sharī'ah requirement that such facilities remain essentially separate from the *sukūk* undertaking and that this separation be properly documented. In the case of servicer cash advances, the national supervisory authority has discretion to assign a risk weight of 0% to such facilities.

6.2.23 Treatment of Credit Risk Mitigation for Securitisation Exposures

732. The treatment applies to an IIFS that has obtained a credit risk mitigant to a securitisation exposure. Credit risk mitigants include guarantees, collateral and on-balance sheet netting or any other Sharī'ah-compliant credit risk mitigation as recognised by the regulatory authority. Collateral in this context is that used to mitigate the credit risk of a securitisation exposure, rather than the underlying exposures of the securitisation transaction, subject to fulfilling criteria in section 6.2.3.

733. Eligible collateral is limited to that recognised under the standardised approach for credit risk mitigation (section 4.1.5). Collateral pledged by SPEs may be recognised as a

¹⁶⁹ It is, however, not permissible for the manager of *sukūk*, whether the manager acts as *muḍārib* (investment manager), or *shārik* (partner) or *wakīl* (agent) for investment, to undertake to offer loans to *sukūk* holders when actual earnings fall short of expected earnings. It is permissible, however, to establish a reserve account for the purpose of covering such shortfalls to the extent possible, provided the same is mentioned in the prospectus. It is not objectionable to distribute expected earnings, on account, or to obtain project financing on account of the *sukūk* holders.

¹⁷⁰ A *qard* (interest-free loan) made to enhance earnings raises issues of Sharī'ah compliance and must be distinguished from credit enhancement by means of "excess spread", as described above.

credit risk mitigation.

6.2.24 Treatment of Credit Enhancement Provided by an Issuer or Originator

734. For *sukūk* with credit enhancement provided by the issuer or the originator, the risk weight is based on the credit rating of the credit enhancer. See section 6.2.6 for details of various types of credit enhancements.

6.2.25 Capital Requirements where the IIFS is the Credit Enhancer

735. When the IIFS provides credit protection to a securitisation exposure, it must calculate a capital requirement on the covered exposure as if it were an investor in that securitisation. If the IIFS provides protection to a *sukūk* issuance, it must treat the credit protection provided based on the risk of the underlying assets of the *sukūk*. If the IIFS provides protection to a *sukūk* issuance that has no legal transfer of assets, it must treat the credit protection provided based on the ECAI rating of the originator (as shown in the table in paragraph 736).

6.2.26 Treatment of Credit Enhancement Provided by a Structure

736. Exposures in a Sharī'ah-compliant credit enhancement structure (covered in section 6.2.6) and retained securitisation exposures (covered in section 6.2.21) would be risk-weighted as shown in Table 42.

1.11 Risk weights

Table 43					
Rating	AAA to AA+	A+ to A–	BBB+ to BBB–	BB+ to BB–	B+ and below or unrated
Risk weight	20%	50%	100%	350%	1250%

737. For off-balance sheet exposures, the IIFS should apply CCF and then risk-weight the resulting credit-equivalent amount. If such an exposure is rated, a CCF of 100% will be applicable. A risk weight of 1250% will be applicable for positions with long-term rating of B+ and below. The same risk weight shall also be applicable for unrated positions.

6.2.27 Credit Risk Mitigation for Securitisation Exposures

6.2.27.1 Eligible credit risk mitigation techniques for protection buyers

738. An IIFS may recognise credit protection purchased on a securitisation exposure

when calculating capital requirements subject to the following conditions:

- a. Collateral recognition is limited to that permitted under the credit risk mitigation framework specified earlier in this standard.
- b. Collateral pledged by SPEs may be recognised.
- c. SPEs cannot be recognised as eligible guarantors.
- d. Guarantees or other CRM tools fulfil operation requirements specified under the CRM section earlier in this standard.

739. In cases where an IIFS provides full (or pro rata) credit protection to a securitisation exposure, the IIFS must calculate its capital requirements as if it directly holds the portion of the securitisation exposure on which it has provided credit protection. If the conditions set out in paragraph 738 are fulfilled, the IIFS buying full (or pro rata) credit protection may recognise the credit risk mitigation on the securitisation exposure in accordance with the CRM framework.

SECTION 7: REAL ESTATE ACTIVITIES

7.1 Current Regulatory Environment of Real Estate Activities

740. Regulatory and/or supervisory authorities in a number of jurisdictions permit IIFS to invest in real estate directly on their balance sheets, or as part of off-balance sheet asset management activities, or indirectly through a wholly or majority-owned subsidiary. Real estate lends itself as a permissible asset class, as Sharī'ah rules and principles allow such investment. However, there is a general concern that such investments may expose the IIFS to the effects of cyclical real estate markets.

741. Conventional financial institutions in general cannot engage in real estate investments unless they obtain consent from the regulatory authority. These institutions are required to comply with applicable capital standards, and the authority determines that the activity poses no significant risk to the depositors. They also need to have an adequate risk management process in place, and the overall financial conditions (including capital requirements) should be able to withstand potential risk associated with the holding of investment or financing property. In most instances, the authorities require conventional institutions to establish a subsidiary or dedicated branch to conduct the real estate activities, so as to place these activities in a separate corporate entity and thus not expose their depositors to the risks of such investments.

742. In the case of IIFS, the IFSB conducted a survey which indicated that, following the last financial crisis, supervisory authorities in many jurisdictions have been quite proactive in supervising the real estate portfolios of the IIFS in their jurisdictions, and some of them have updated their regulations and guidelines to align with the rapidly changing market conditions.

743. The IFSB survey also revealed that, in some cases, certain real estate activities are classified as financing rather than investment. The regulatory authorities treat these exposures as a type of mortgage, and they require them to be treated with the same regulatory credit risk treatment. In contrast, some IIFS act as property developers and/or then owners, an activity which is normally undertaken by real estate specialists. Such types of real estate activities raise supervisory issues, particularly with respect to risk management and capital adequacy,¹⁷¹ especially during economic downturns. In certain jurisdictions, the supervisory authorities provide more detailed and specific guidance on the definition and classification of permitted activities.

¹⁷¹ IFSB-5: *Guidance on Key Elements in the Supervisory Review Process for IIFS*, December 2007, paragraph 63.

7.2 Definitions

751. Real estate activities include various types of “financing” or “investment” in completed and under-construction properties, as well as land used for such purposes. Real estate investment activity involves, among other things, the purchase, sale and development of land, as well as residential and non-residential buildings.

752. *Financing* of real estate refers to an IIFS providing financing¹⁷² as a part of usual financial intermediation activities to generate revenues from scheduled payments made by its customers. Similar to other types of financing, real estate financing exposes the IIFS to a variety of risks, requiring effective risk management practices to be in place. In the case of an IMB contract, since the customers intend ultimately to purchase the underlying asset,¹⁷³ the assets held by the IIFS under such a contract during the lease period will be considered as part of financial intermediation activities – that is, Islamic financing.

753. *Investment* in real estate essentially refers to an IIFS investing in immovable properties when the IIFS invests its own and/or customers’ funds directly in real estate assets or in real estate projects (or in partnerships in real estate or real estate projects) for commercial purposes to achieve profits from property development, or to benefit from asset price appreciation. In the case of an operating *ijārah* contract, though an IIFS leases a specified asset to the customer for an agreed period against specified instalments of lease rental, the market or price risk attached to the residual value of the leased asset at the end of the contract remains with the IIFS. Thus, an operating *ijārah* is considered as real estate investment for the purpose of calculating capital adequacy under this section.

754. With the exception of operating *ijārah* mentioned in paragraph 753, the main criterion in distinguishing between real estate investment and financing is the existence of a regular cash flow due or receivable from a customer in respect of the asset. The existence of such a cash flow indicates that the IIFS is providing financing to the customer for the asset, and the customer, in turn, is servicing that financing; while the absence of such a cash flow indicates that the IIFS has invested in the asset on its own account (or jointly in its own and its

¹⁷² Usually, real estate financing is provided by IIFS to enable customers to acquire residential or commercial property or the usufruct thereof. Commonly used Shari’ah-compliant structures to provide real estate financing include: operating *ijārah*, IMB, diminishing *mushārahah*, *murābahah* and *istisnā’*. Since acting as lessor under operating *ijārah* is also a way in which IIFS hold real estate assets as income-producing investments, for the purpose of this section it is considered as real estate investment, whereas IMB is considered as real estate financing.

¹⁷³ In an IMB contract, title to the leased asset is normally acquired by the customer (lessee) at the end of the lease period either by purchase of the asset for a token consideration or payment of the residual value, or as a gift from the lessor.

unrestricted IAH accounts¹⁷⁴). The supervisory authority should determine the precise criteria that characterise real estate investments of IIFS within its jurisdiction.

755. In the context of this document, a real estate investment (as opposed to a real estate financing transaction) may fall into one of three broad categories:

- a. the activity of holding real estate at any stage of the development process, or even completed properties, where such a holding is not part of a financing transaction for a third party (such as IMB or *murābahah*);
- b. an asset holding where there is no binding promise from a third party to acquire (by *murābahah*) or to lease the asset (by IMB), and the holding period has exceeded a relatively short period such as six months (at supervisory discretion) and based on evidence of management intention; or
- c. operating *ijārah*.

7.3 Risk Exposures in Real Estate Activities

756. Investments in real estate – that is, holding the assets – at any stage of the development process, or completed properties, can be generally characterised as risky owing to the illiquidity and volatility of the asset class, which is prone to cyclical "booms" (asset bubbles) and subsequent "busts" entailing the risk of a significant loss of capital. The risk is likely to be higher for properties under development compared to completed ones, as the former are particularly illiquid.

757. Real estate financing exposure might reach a level that could lead to undesirable outcomes in the event of a significant economic downturn, when the delinquency rate becomes a critical issue for an exposed IIFS, as this might render the related assets non-performing and seriously affect its cash flows. In such economic conditions, the value of the collateral (i.e. of the leased assets as "quasi-collateral") may be significantly impaired if a large number of recipients of real estate financing become financially distressed. In a period of excessive credit growth in the economy, an IIFS's financing behaviour might become quite aggressive, resulting in the compromise of its due diligence process in credit evaluation. To guard against such an over-lenient attitude in the due diligence process, IIFS should have control procedures in place, with regular monitoring by senior management and relevant committees.

758. In the case of a non-binding promise to purchase an asset in *murābahah*, or to lease

¹⁷⁴ The investment of funds supplied by current accounts and CMT-based deposits is in a different category from the investment of UIAH funds, since the capital of the former is a liability of the IIFS and, provided it remains solvent, the fund providers are not exposed to adverse outcomes on real estate investments.

an asset under a contract of IMB, the circumstance that gives rise to the risks is the possibility of loss on disposal of such an asset, or from having a property vacant over a certain period, or from a significant drop in prices during the holding period.

759. Real estate investment exposes unrestricted investment account holders to the same risks as those borne by the IIFS when the funds are commingled. During downturns in the property cycle, the returns to UIAH could decline sharply or become losses owing to the level of delinquency in real estate financing and a fall in the market value of real estate. The UIAH are typically risk-averse investors who trust the IIFS to earn a reasonable level of safe, sustainable returns for them. Moreover, UIAH have no representation on the IIFS's board of directors or other representation with regard to the management of their funds.

760. Owing to the risks outlined above, real estate investment activities are suitable for an IIFS only on a very limited scale and under restrictive conditions designed to control the various risks posed to the IIFS and its UIAH. Supervisory authorities should lay down guidelines for IIFS' real estate exposures, requiring them to demarcate clearly such exposures into financing and investment categories. Supervisors should also meticulously monitor real estate exposures at both the micro (IIFS) and macro (jurisdiction) levels.

7.3.1 Indirect Exposure in Real Estate

761. IIFS can engage in indirect real estate activities where real estate business is conducted by separate entities. Such exposure can take a number of forms. For example, an IIFS can: (a) be involved in real estate activities through a joint venture or equity participation with a property development company; (b) establish a real estate subsidiary to carry out related commercial activities; or (c) accept real estate as collateral against its financing to the customers.

7.3.1.1 Treatment of real estate investment exposures through joint venture or equity participation

762. As mentioned in [section 5.6.4](#) (equity position risk, paragraph 584(b)), an IIFS can enter into a private commercial enterprise to undertake a business venture (which can include real estate). There are two possible methods used to calculate equity exposures in this type of investment. According to the simple risk-weight method, the risk weight shall be applied to the exposures (net of specific provisions) based on the treatment of equity exposures in the banking book. The applicable risk weight for such exposures shall entail a 400% RW for investments in shares that are not publicly traded less any specific provisions for impairment. Alternatively, a 300% RW will be applicable for investments in shares that are publicly traded less any specific provisions for impairment. If there is a third-party guarantee to make good

impairment losses, the risk weight of the guarantor shall be substituted for that of the assets for the amount of any such guarantee. In order to use the alternative slotting method for calculation of risk weights, an IIFS shall be required to seek supervisory approval and map its risk weights into four supervisory categories as set out in Appendix D (specialised financing).

7.3.1.2 Treatment of investment exposures in real estate subsidiaries of IIFS

763. From a capital adequacy perspective, where an IIFS has a subsidiary through which it carries out real estate investment, its investments in the capital of such a subsidiary should be treated in the same way as an investment in a non-banking commercial entity – that is, by application of a 1250% RW (assuming a minimum capital requirement of 8%) for the investment if this amount is greater than 15% of its regulatory capital. This risk weight will be applicable on the portion of the investment that exceeds the 15% threshold. The investment in real estate entities below the 15% level will be risk-weighted not lower than 100%.

7.3.1.3 Treatment of real estate taken as collateral

764. If an IIFS accepts real estate as collateral – whether residential or commercial – from customers against its financing activities, the eligibility of such real estate as a credit risk mitigant will be subject to the provisions of paragraphs 249 to 256, section 4.1.5. Furthermore, to pledge a real estate asset as collateral, the requirements explained in paragraphs 265, 269 and 271 will apply. Moreover, an IIFS is expected to take the following steps when the collateral is in the form of real estate:

- a. It should be ensured that any claim on a collateral is properly filed on a timely basis. Collateral interests must reflect a perfected lien; that is, appropriate steps are taken in relation to the real estate so that security interest of the IIFS is effective against customer's default and/or third parties.
- b. The collateral agreement and the underlying legal process should enable the IIFS to have access to and to dispose of the collateral within a reasonable time frame.
- c. The realisable value of the collateral (after deducting any haircuts) should be able adequately to cover the amount of financing.
- d. Depending on the type of real estate and market conditions prevailing in the relevant property market, the valuation should be performed at a minimum once every year, or more frequently if needed.
- e. The real estate should be insured under a *takāful* scheme against damage and deterioration.
- f. Ongoing claims on property (such as tax) should be regularly monitored.

- g. Any risk of environmental liability arising from the property such as contamination in the soil, or of ground water, etc., should be taken into account.

7.4 Supervision of Real Estate Activities

765. In jurisdictions where real estate investment is permissible, some supervisory authorities adopt a combined approach in limiting the risks to which the IIFS or its IAH are exposed through restricting the total amount of exposures in the sector, restricting the usage of unrestricted investment accounts, or applying specific risk weights for this financing or investment.¹⁷⁵

766. Primarily, the supervisory authority needs to satisfy itself that the IIFS meets the prudential requirements in respect of its engaging in real estate activities on its own balance sheet or indirectly through equity investment or in a wholly/majority-owned subsidiary. The authority may, among other things, set the type of activity, the level of real estate finance or investment which is suitable for the IIFS, and the concentration level of risks. It may also set the financial conditions and managerial resources of the IIFS in order to ensure the IIFS's ability to manage competently its real estate activities, to determine that the IIFS is adequately protected from litigation risk,¹⁷⁶ and to set robust risk management, stress testing and valuation processes, as well as appropriate practices with regard to the IIFS commingling its funds with those of its UIAH.

767. In the case of restricted investment accounts, which are clearly for the purpose of real estate investment, supervisory authorities may apply a limit to single exposures at their discretion in order to cater for the risks related to cyclical movements in the real estate market.

7.5 Risk-Weighting of Real Estate Exposures

768. Section 7.2 has delineated the criteria for demarcating real estate exposures of IIFS into financing and investment exposures. The calculation of risk weights for real estate financing and investment exposures is summarised below.

7.5.1 Real Estate Financing

769. As mentioned in footnote 174 an IIFS can provide real estate financing on the basis of

¹⁷⁵ For conventional institutions, the normal treatment is for a bank's investment as a parent in a real estate subsidiary or affiliate to be deducted from its capital (equivalent to a 1250% RW if the minimum capital requirement is 8%). IIFS in some countries currently follow a similar deduction approach, but other countries apply risk weights of 100% or less (i.e. treatment as credit risk) or risk weights of other assets.

¹⁷⁶ In order to reduce litigation risk, an IIFS should have clearly defined and properly documented contractual relationships and rights and obligations of the parties involved in its real estate financing and investment activities. IIFS are also expected to execute legal documentation in correct order and sequence for each type of underlying contract, as advised by the respective SSB to minimise legal and Shari'ah non-compliance risk.

Ijārah, IMB, diminishing *mushārahah*, *murābahah* and *istisnā`*. Except for operating *ijārah*, use of other contracts to provide real estate finance to customers will commonly fall in the category of financing. The risk weights for these exposures should be calculated based on the guidance provided in the relevant sections, as set out below:

- a. IMB: [section 5.5](#)
- b. Diminishing *mushārahah*: [sections 3.1.3.10.2](#) and [5.6.3](#)
- c. *Murābahah*: [section 5.1](#)
- d. *Istisnā`*: [section 5.4](#)
- e. For all the above contracts used to provide real estate financing, the risk weight of a debtor, counterparty or other obligor can be reduced and given preferential treatment if criteria mentioned in [section 4.1.3.7](#) are applicable.

7.5.2 Real Estate Investment

770. The risk weights for an IIFS's indirect exposure in real estate investment activities have been covered in [section 6.4](#). In the following, the risk weights for direct exposure to real estate investment are elucidated.

771. IIFS are required to hold regulatory capital against all of their real estate investment exposures.¹⁷⁷ The risk-weighted amount of a real estate investment exposure is computed by multiplying the amount of the carrying value¹⁷⁸ by the appropriate risk weight.

772. Referring to the three categories of real estate investment as mentioned in paragraph 755, the applicable risk weights for each category are as follows:

- (a) For the treatment of a single investment exposure: 187.5%.¹⁷⁹
- (b) For the treatment of an exposure due to a holding for financing purposes during the non-binding stage of the transaction: 187.5%.
- (c) For the treatment of an exposure resulting from operating *ijārah*: see the risk weights set

¹⁷⁷ When the standard IFSB formula for calculating the capital adequacy ratio is applied, assets financed by IAH funds are not included in computing the risk-weighted assets in the denominator of the CAR, so that the risk weights are irrelevant. When the supervisory discretion version of the CAR formula is applied, a proportion – “alpha” – of the RWA financed by IAH funds is included in the denominator of the CAR; thus, the risk weights apply only to the proportion “alpha” of the assets financed by IAH funds.

¹⁷⁸ See [section 6.7](#) of this document on the valuation of real estate investments.

¹⁷⁹ The risk weight of 187.5% is equivalent to a capital charge of 15% if the minimum capital requirement is 8%.

out in Table 35.

773. When IIFS are involved extensively in real estate investment activities, supervisors may impose a higher capital charge on a customised basis to cushion unexpected losses. Further, the supervisory authority may increase the level of CCF in cases where IIFS are engaged in real estate as part of off-balance sheet asset management activities.

7.6 Valuation of Real Estate Activities

774. The measurement of risk exposures in real estate activities is dependent on sound and proper valuations from third parties.¹⁸⁰ The risks inherent in the real estate activities depend on a number of factors, including the type of property and the independent parties who will assess these activities. Therefore, it is vital that the supervisory authority satisfy itself that an IIFS has in place adequate valuation rules and proper valuation methodologies. Such methodologies should include the assessment of market value derived from chosen valuation models¹⁸¹ and of the reliability of data used for the purpose of valuation.

775. It is essential that a supervisory authority ensures that IIFS within its jurisdiction value their property activities on a consistent basis. Otherwise, there can be no level playing field for capital adequacy treatment. In the case of assets under *murābahah* or *ijārah*/IMB transactions, the supervisory authority should satisfy itself on appropriate valuation to estimate the amount for which a property switches from investment to financing, or vice versa.

776. The valuation of an IIFS's real estate investments shall be determined by independent third parties¹⁸² or an in-house function. The valuations so conducted should be used as a basis for capital adequacy calculation and monitoring of statutory limits on real estate exposure, if any. Supervisory authorities should require IIFS to have robust procedures to substantiate the results of valuations while comparing them with some independent information source such as property market reports or reliable publications. IIFS should scrutinise any significant variations in these valuations and make any necessary rectifications.

¹⁸⁰ Based on the size of an IIFS's involvement in real estate activities as well as its in-house expertise and control procedures, supervisory authorities may allow the IIFS to use in-house valuations. This function can also undertake property research, carry out valuations, provide technical advice and execute marketing strategies for real estate activities.

¹⁸¹ Commonly used valuation models for real estate include the fair value model and the cost model. The use of these models shall be subject to supervisory guidelines and management intention for categorising such investments as held-for-use or held-for-sale.

¹⁸² Normally this task is undertaken by specialised valuation or appraiser companies that are authorised/approved by the relevant supervisory authorities or banking associations.

Appendix A: Leverage ratio

This appendix includes the relevant provisions applicable for the purpose of calculating the leverage ratio.

Shari'ah-compliant hedging exposure

1. Shari'ah-compliant hedging instruments are Sharī'ah-compliant alternatives to derivative contracts. For Sharī'ah-compliant hedging instruments, the accounting measure of the exposure shall be used. For the purpose of leverage ratio exposure measure, exposures to Shariah-compliant hedging instruments are included by means of two components:

- a. Replacement cost (RC) associated with all Sharī'ah-compliant hedging transactions (including exposures resulting from direct transactions between a client and a central counterparty (CCP) where the IIFS guarantees the performance of its clients' hedging trade exposures to the CCP). Where applicable, the cash portion of the variation margin received may be used to reduce the RC portion of the leverage ratio exposure measure, and the receivables assets from cash variation margin provided may be deducted from the leverage ratio exposure measure as provided below:
 - i. In the case of cash variation margin received, the receiving institution offering Islamic financial services (IIFS) may reduce the RC (but not the potential future exposure [PFE] component) of the exposure amount of the Shari'ah-compliant hedging instrument as specified in paragraph 8 below.
 - ii. In the case of cash variation margin provided to a counterparty, the posting IIFS may deduct the resulting receivable from its leverage ratio exposure measure where the cash variation margin has been recognised as an asset under the IIFS's operative accounting framework, and instead include the cash variation margin provided in the calculation of the Shari'ah-compliant hedging instrument RC as specified in paragraph 8 below.
- b. Add-on amount for PFE of all hedging transactions in accordance with paragraph 9 below. The amount here should be scaled up with a multiplier of 1.4.

Treatment of clearing services

2. In cases where an IIFS acting as a clearing member (CM)¹⁹ offers clearing services to its clients, the IIFS' trade exposures to the CCP that arise when it is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the CCP defaults must be captured by applying the same treatment that applies to any other type of Shari'ah-compliant hedging exposure. However, if the IIFS, based on its contractual arrangements with the client, is not obligated to reimburse the client for any losses suffered in

the event that a qualifying central counterparty (QCCP) defaults, the IIFS need not recognise the resulting trade exposures to the QCCP in the exposure measure.

3. IIFS may be required to add the adjusted effective notional amount of Sharī'ah-compliant hedging instruments which may be reduced by the total amount of negative changes in fair value amounts that have been incorporated into the calculation of Tier 1 capital with respect to Sharī'ah-compliant hedging instruments.

Shari'ah-compliant alternatives to Securities Financing Transactions (SFTs)

4. Shari'ah-compliant alternatives to SFTs are included in the exposure measure according to the treatment described below. The treatment recognises that secured financing and funding sources in the form of SFTs is an important source of leverage, and ensures consistent international implementation by providing a common measure for dealing with the main differences in the operative accounting frameworks.

5. *General treatment (IIFS acting as principal)*: the sum of the amounts in subparagraphs (a) and (b) below is to be included in the leverage ratio exposure measure:

- a. Gross SFT assets¹⁸³ recognised for accounting purposes (i.e. with no recognition of accounting netting),¹⁸⁴ adjusted as follows:
 - i. excluding from the exposure measure the value of any securities received under an SFT, where the IIFS has recognised the securities as an asset on its balance sheet;¹⁸⁵ and
 - ii. cash payables and cash receivables in SFTs with the same counterparty may be measured net if all the following criteria are met:
 - a. transactions have the same explicit final settlement date; in particular, transactions with no explicit end date but which can be unwound at any time by either party to the transaction are not eligible;
 - b. the right to set off the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable both currently in the normal course

¹⁸³ For SFT assets subject to novation and cleared through QCCPs, "gross SFT assets recognised for accounting purposes" are replaced by the final contractual exposure – that is, the exposure to the QCCP after the process of novation has been applied – given that pre-existing contracts have been replaced by new legal obligations through the novation process. However, IIFS can only net cash receivables and cash payables with a QCCP if the criteria in paragraph 2 of this appendix are met. Any other netting permitted by the QCCP is not permitted for the purposes of the Basel III leverage ratio.

¹⁸⁴ Gross SFT assets recognised for accounting purposes must not recognise any *accounting* netting of cash payables against cash receivables (e.g. as currently permitted under the IFRS and US GAAP accounting frameworks). This regulatory treatment has the benefit of avoiding inconsistencies from netting which may arise across different accounting regimes.

¹⁸⁵ This may apply, for example, under US GAAP where securities received under an SFT may be recognised as assets if the recipient has the right to rehypothecate but has not done so.

of business and in the event of the counterparty's (i) default; (ii) insolvency; or (iii) bankruptcy; and

- c. the counterparties intend to settle net, settle simultaneously, or the transactions are subject to a settlement mechanism that results in the functional equivalent of net settlement – that is, the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date. To achieve such equivalence, both transactions are settled through the same settlement system and the settlement arrangements are supported by cash and/or intraday credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day and any issues arising from the securities legs of the SFTs do not interfere with the completion of the net settlement of the cash receivables and payables. In particular, this latter condition means that the failure of any single securities transaction in the settlement mechanism may delay settlement of only the matching cash leg or create an obligation to the settlement mechanism, supported by an associated credit facility. If there is a failure of the securities leg of a transaction in such a mechanism at the end of the window for settlement in the settlement mechanism, then this transaction and its matching cash leg must be split out from the netting set and treated gross.¹⁸⁶

- b. A measure of CCR calculated as the current exposure without an add-on for PFE, calculated as follows:

- i. Where a qualifying Master Netting Agreement (MNA)¹⁸⁷ is in place, the current exposure (E^*) is the greater of zero and the total fair value of securities and cash lent to a counterparty for all transactions included in the qualifying MNA ($\sum E_i$), less the total fair value of cash and securities received from the counterparty for those transactions ($\sum C_i$). This is illustrated in the following formula:

$$E^* = \max \{0, [\sum E_i - \sum C_i]\}$$

- ii. Where no qualifying MNA is in place, the current exposure for transactions with a counterparty must be calculated on a transaction-by-transaction basis – that is,

¹⁸⁶ Specifically, the criteria in paragraph 2 of this appendix are not intended to preclude a Delivery Versus Payment (DVP) settlement mechanism or other type of settlement mechanism, provided that the settlement mechanism meets the functional requirements set out in paragraph 2 of this appendix. For example, a settlement mechanism may meet these functional requirements if any failed transactions (i.e. the securities that failed to transfer and the related cash receivable or payable) can be re-entered in the settlement mechanism until they are settled.

¹⁸⁷ A “qualifying” MNA is one that meets the requirements under paragraphs 6 and 7 of the this appendix.

each transaction i is treated as its own netting set, as shown in the following formula:

$$E_i^* = \max \{0, [E_i - C_i]\}$$

E_i^* may be set to zero if (i) E_i is the financing to a counterparty, (ii) this transaction is treated as its own netting set, and (iii) the associated cash receivable is not eligible for the netting treatment.

6. For the purposes of this subparagraph, the term “counterparty” includes not only the counterparty of the bilateral repo transactions but also triparty repo agents that receive collateral in deposit and manage the collateral in the case of triparty repo transactions. Therefore, securities deposited at triparty repo agents are included in “total value of securities and cash lent to a counterparty” (E) up to the amount effectively lent to the counterparty in a repo transaction. However, excess collateral that has been deposited at triparty agents but that has not been lent out may be excluded.

Shari’ah-compliant alternative to derivative exposures

7. The calculation of a Shari’ah-compliant alternative to derivative exposures for the leverage ratio exposure measure is based on a modified version of the standard set out in the Consolidated Basel Framework and provision of the standardised approach for measuring counterparty credit risk exposures (hereafter “SA-CCR framework”).¹⁸⁸

Calculation of replacement cost

8. The replacement cost of a transaction or netting set is measured as follows:

$$RC = \max \{V - CVM_r + CVM_p, 0\}$$

where: (i) V is the market value of the individual derivative transaction or of the derivative transactions in a netting set; (ii) CVM_r is the cash variation margin *received* that meets the conditions set out in paragraph 1 of this and for which the amount has not already reduced the market value of the derivative transaction V under the bank’s operative accounting standard; and (iii) CVM_p is the cash variation margin *provided* by the bank and that meets the same conditions.

Calculation of potential future exposure

¹⁸⁸ Basel Committee on Banking Supervision (BCBS), *The Standardised Approach for Measuring Counterparty Credit Risk Exposures*, March 2014 (rev. April 2014), www.bis.org/publ/bcbs279.pdf.

9. The potential future exposure for derivative exposures must be calculated in accordance with paragraphs 146 to 187 of Annex 4 of the SA-CCR framework. Mathematically:

$$PFE = multiplier \cdot AddOn^{aggregate}$$

10. For the purposes of the leverage ratio framework, the multiplier is fixed at 1. Moreover, when calculating the add-on component, for all margined transactions the maturity factor set out in paragraph 164 of Annex 4 of the SA-CCR framework may be used. Further, as written options create an exposure to the underlying, they must be included in the leverage ratio exposure measure by applying the treatment described in this Annex, even if certain written options are permitted the zero exposure at default (EAD) treatment allowed in the risk-based framework.

Bilateral netting

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

- the law that governs the individual transactions; and
- the law that governs

The national supervisor, after consultation when necessary with other relevant supervisors, must be satisfied that the netting is enforceable under the laws of each of the relevant jurisdictions;¹⁸⁹ and

- 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.

12. Contracts containing walkaway clauses will not be eligible for netting for the purpose of calculating the leverage ratio exposure measure pursuant to this framework. A walkaway clause is a provision that 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.

Securities financing transaction exposures

13. *Qualifying master netting agreement*: the effects of bilateral netting agreements¹⁹⁰ for covering SFTs 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, netting agreements must:

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

¹⁸⁹ Thus, if any of these supervisors are dissatisfied about enforceability under its laws, the netting contract or agreement will not meet the condition and neither counterparty could obtain supervisory benefit.

¹⁹⁰ The provisions related to qualifying master netting agreements for SFTs are intended for the calculation of the counterparty credit risk measure of SFTs as set out in paragraph 2 of this appendix.

- d. be together with the rights arising from provisions required in (a) and (c) above, legally enforceable in each relevant jurisdiction upon the occurrence of an event of default regardless of the counterparty's insolvency or bankruptcy.

14. Netting across positions held in the banking book and trading book will only be recognised when the netted transactions fulfil the following conditions:

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

Off-balance sheet (OBS) items

15. For the purposes of the leverage ratio, OBS items will be converted into credit exposures by multiplying the committed but undrawn amount by a credit conversion factor (CCF). For these purposes, commitment means any contractual arrangement that has been offered by the bank and accepted by the client to extend credit, purchase assets or issue credit substitutes. It includes any such arrangement that can be unconditionally cancelled by the bank at any time without prior notice to the obligor.¹⁹¹ It also includes any such arrangement that can be cancelled by the bank if the obligor fails to meet conditions set out in the facility document, including conditions that must be met by the obligor prior to any initial or subsequent drawdown arrangement.

9. A 100% CCF will be applied to the following items:
- a. Direct credit substitutes – for example, general guarantees of indebtedness (including standby letters of credit serving as financial guarantees for loans and securities) and acceptances (including endorsements with the character of acceptances).
 - b. Forward asset purchases, forward deposits and partly paid shares and securities, which represent commitments with certain drawdown.
 - c. The exposure amount associated with unsettled financial asset purchases (i.e. the commitment to pay) where regular-way unsettled trades are accounted for at settlement date. Banks may offset commitments to pay for unsettled purchases and

¹⁹¹ At national discretion, a jurisdiction may exempt certain arrangements from the definition of commitments provided that the following conditions are met: (i) the bank receives no fees or commissions to establish or maintain the arrangements; (ii) the client is required to apply to the bank for the initial and each subsequent drawdown; (iii) the bank has full authority, regardless of the fulfilment by the client of the conditions set out in the facility documentation, over the execution of each drawdown; and (iv) the bank's decision on the execution of each drawdown is only made after assessing the creditworthiness of the client immediately prior to drawdown. Exempted arrangements that met the above criteria are confined to certain arrangements for corporates and small and medium-size enterprises, where counterparties are closely monitored on an ongoing basis.

cash to be received for unsettled sales provided that the following conditions are met: (i) the financial assets bought and sold that are associated with cash payables and receivables are fair valued through income and included in the bank's regulatory trading book as specified by paragraphs 8 to 20 of the market risk framework; and (ii) the transactions of the financial assets are settled on a DVP basis.

- Off-balance sheet items that are credit substitutes not explicitly included in any other category.
16. A 50% CCF will be applied to note issuance facilities (NIFs) and revolving underwriting facilities (RUFs) regardless of the maturity of the underlying facility.
17. A 50% CCF will be applied to certain transaction-related contingent items (e.g. performance bonds, bid bonds, warranties and standby letters of credit related to particular transactions).
18. A 40% CCF will be applied to commitments, regardless of the maturity of the underlying facility, unless they qualify for a lower CCF.
13. A 20% CCF will be applied to both the issuing and confirming banks of short-term¹⁹² self-liquidating trade letters of credit arising from the movement of goods (e.g. documentary credits collateralised by the underlying shipment).
19. A 10% CCF will be applied to commitments that are unconditionally cancellable at any time by the bank without prior notice, or that effectively provide for automatic cancellation due to deterioration in a recipient of financing's creditworthiness. National supervisors should evaluate various factors in the jurisdiction, which may constrain banks' ability to cancel the commitment in practice, and consider applying a higher CCF to certain commitments as appropriate.
20. Where there is an undertaking to provide a commitment on an OBS item, banks are to apply the lower of the two applicable CCFs.¹⁹³
21. *OBS securitisation exposures must be treated as per the second bullet of paragraph 20 of the Basel securitisation framework.*¹⁹⁴

¹⁹² That is, with a maturity below one year. For further details, see BCBS, *Treatment of Trade Finance under the Basel Capital Framework*, October 2011, www.bis.org/publ/bcbs205.pdf.

¹⁹³ For example, if a bank has a commitment to open short-term self-liquidating trade letters of credit arising from the movement of goods, a 20% CCF will be applied (instead of a 40% CCF); and if a bank has an unconditionally cancellable commitment described in paragraph 10 of this appendix, to issue direct credit substitutes, a 10% CCF will be applied (instead of a 100% CCF).

¹⁹⁴ BCBS, *Revisions to the Securitisation Framework*, December 2014 (rev. July 2016), www.bis.org/bcbs/publ/d303.pdf.

Appendix B: Definition of Business Indicator Components

BI Component	P&L or Balance	Description	Typical Sub-Items
Profit, <i>ijarah</i> rental and dividend	Profit income	Profit income from all financings, financial assets and other profit income (includes those from <i>ijarah</i> contracts)	<ul style="list-style-type: none"> Profit income from all financings, assets available for sale, assets held to maturity, trading assets, <i>ijarah</i> rentals Profit income from Shari'ah-compliant hedge accounting Other profit income, not included in the categories above Profits from leased assets
	Profit payment to fund providers	Profit payments on all financial liabilities and other return payments (includes rentals payable on <i>ijarah</i> losses, depreciation and impairment of <i>ijarah</i> assets)	<ul style="list-style-type: none"> expenses or returns payable on funds received from investment account holders, current account deposits, debt securities issued, <i>ijarah</i> contracts
	Profit-earning assets (balance sheet item)	Total gross outstanding financings, <i>sukuk</i> , other profit-bearing financial assets (including sovereign <i>sukuk</i>), and <i>ijarah</i> assets measured at the end of each financial year	

	Dividend income	Dividend income from investments in stocks and funds not consolidated in the IIFS's financial statements, including dividend income from non-consolidated subsidiaries, associates and joint ventures.	
Services	Fee and commission income	Income received from providing advice and services. Includes income received by the IIFS as an outsourcer of financial services.	<p>Fee and commission income from:</p> <ul style="list-style-type: none"> • Securities (issuance, origination, reception, transmission, execution of orders on behalf of customers) • Clearing and settlement; Asset management; Custody; Fiduciary transactions; Payment services; Structured finance; Servicing of securitisations; Loan commitments

			and guarantees given; and foreign transactions
	Fee and commission expenses	Expenses paid for receiving advice and services. Includes outsourcing fees paid by the IIFS for the supply of financial services, but not outsourcing fees paid for the supply of non-	Fee and commission expenses from: <ul style="list-style-type: none"> • Clearing and settlement; custody; servicing of securitisations; financing commitments and
	Other operating	Income from ordinary banking operations not included in other BI items but of similar nature	<ul style="list-style-type: none"> • Rental income from investment properties • Gains from non-current assets and disposal groups
	Other operating expenses	Expenses and losses from ordinary banking operations not included in other business indicator (BI) items but of similar nature and from operational loss events (expenses from operating leases should be excluded)	<ul style="list-style-type: none"> • Losses from non-current assets and disposal groups classified as held for sale not qualifying as discontinued operations (IFRS 5.37) • Losses incurred as a consequence of operational loss events (eg fines, penalties, settlements, replacement cost of damaged assets), which have not been provisioned/reserved for in previous years • Expenses related to establishing provisions/reserves for operational loss events

Financial	Net profit (loss) on the trading book	<ul style="list-style-type: none"> • Net profit/loss on trading assets and trading liabilities (<i>sukuk</i> securities, equity securities, financing, other assets and liabilities) • Net profit/loss from hedge accounting
	Net profit (loss) on the banking book	<ul style="list-style-type: none"> • Net profit/loss on financial assets and liabilities measured at fair value through profit and loss • Realised gains/losses on financial assets and liabilities not measured at fair value through profit and loss (financing exposures, assets available for sale, assets held to maturity, financial liabilities measured at amortised cost) • Net profit/loss from hedge accounting • Net profit/loss from exchange differences

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

- income and expenses from insurance or reinsurance businesses;
- premiums paid and reimbursements/payments received from insurance or reinsurance policies purchased;
- administrative expenses, including staff expenses, outsourcing fees paid for the supply of non-financial services (e.g. logistical, IT, human resources), and other administrative expenses (e.g. IT, utilities, telephone, travel, office supplies, postage);
- recovery of administrative expenses, including recovery of payments on behalf of customers (e.g. taxes debited to customers);
- expenses of premises and fixed assets (except when these expenses result from operational loss events);
- depreciation/amortisation of tangible and intangible assets (except depreciation related to operating lease assets, which should be included in financial and operating lease expenses);
- provisions/reversal of provisions (e.g. on pensions, commitments and guarantees given) except for provisions related to operational loss events;
- expenses due to share capital repayable on demand;

- impairment/reversal of impairment (e.g. on financial assets, non-financial assets, investments in subsidiaries, joint ventures and associates);
- changes in goodwill recognised in profit or loss; and
- corporate income tax (tax based on profits, including current tax and deferred).

Appendix C: Operational Guidelines for Countercyclical Buffer

1. This appendix sets out the guidelines for calculating various components of the credit-to-gross domestic product (GDP) gap measure as a tool for implementing the countercyclical buffer (CCyB) regime. The appendix also suggests other metrics and indicators that can support the supervisory authorities in estimating an appropriate level of CCyB in the jurisdiction. It also provides additional guidance to supervisory authorities at various phases of operating the CCyB regime, and deals with some related operational issues – for example, the application of the capital conservation buffer (CCB) to domestic versus internationally active institution(s) offering Islamic financial services (IIFS), and the maximum suggested ceiling.

Computation of Credit-to-GDP Add-on for CCyB

2. The numerator of this measure – that is, credit – will include all types of financing provided by IIFS to the private sector, including that based on profit-sharing contracts such as *muḍārabah* and *mushārahkah*. This harmonised definition of credit and uniform applicability of the CCyB in the jurisdiction stems from the following constructions:

- i) A period of excessive credit growth can impact the IIFS undesirably, even if it has not been the main contributor to such growth.
- ii) An IIFS operating in a jurisdiction will bear the consequences of a credit boom, whether or not it has been involved in excessive credit distribution. Therefore, CCyB will apply equally to all banks and IIFS in the jurisdiction.
- iii) A broad, harmonised definition of credit may limit the incentive for banks and IIFS to divert the supply of credit to other parts of the financial system. Thus, it will provide immunity to the calibration and operation of CCyB to changes over time in the types of institutions providing the funds to the private sector.

3. The definition of credit shall include all credit provided to households and other non-financial private-sector entities by all types of domestic and international banks, IIFS and non-bank financial institutions operating in the jurisdiction, whether domestically or directly from abroad. The definition of credit also includes all kinds of *sukūk* or other types of Sharī`ah-compliant securities, debt securities issued by conventional banks (including securitisation), issued domestically or internationally to fund households and other non-financial private-sector entities, regardless of who holds the securities. The definition of credit also encompasses securities and *sukūk* held by banks, IIFS and other financial institutions in their trading portfolios and banking books, as well as securities held by other residents and non-residents. Depending on the sophistication and size of the inter-financial system flows in a jurisdiction and its relevance for gauging the excessive credit growth and build-up of system-wide risk, supervisory authorities may wish to include gross credit flows between various banking and non-banking financial institutions in the definition of credit.

4. For calculating the jurisdiction-specific CCyB add-on, as a percentage of risk-weighted assets (RWAs), the following steps will be carried out:

i) Calculate the aggregate private-sector credit-to-GDP ratio:

This ratio in period t for each jurisdiction shall be calculated as:

$$\text{Ratio}_t = \text{Credit}_t / \text{GDP}_t \times 100\%$$

[in notational form] $y_t = \text{aggregate private-sector credit-to-GDP ratio}$

GDP_t is domestic GDP and Credit_t is a broad measure of credit to the private, non-financial sector in period t . Both GDP and credit are in nominal terms and on a quarterly frequency.

ii) Calculate the credit-to-GDP gap:

The credit-to-GDP ratio is compared to its long-term trend. If the credit-to-GDP ratio is significantly above its trend (i.e. there is a large positive gap), then this is an indication that credit may have grown to excessive levels relative to GDP.

The gap (Gap) in period t for each country is calculated as the actual credit-to-GDP ratio minus its long-term trend (Trend):

$$\text{Gap}_t = \text{Ratio}_t - \text{Trend}_t$$

[in notational form]

$\hat{y}_t = \text{Hodrick-Prescott trend of } y_t$

$$z_t = y_t - \hat{y}_t = \text{credit-to-GDP gap}$$

For calculating the trend in time t , a simple moving average or linear time trend can be used. Supervisory authorities may opt to use the Hodrick-Prescott filter, which has an additional advantage that it tends to give higher weights to more recent observations that can help to identify any structural breaks more effectively. To establish the trend (Trend_t), a one-sided Hodrick-Prescott filter with a high smoothing parameter (λ) of 400,000 will be used. The information available at only each point in time shall be used in these computations.

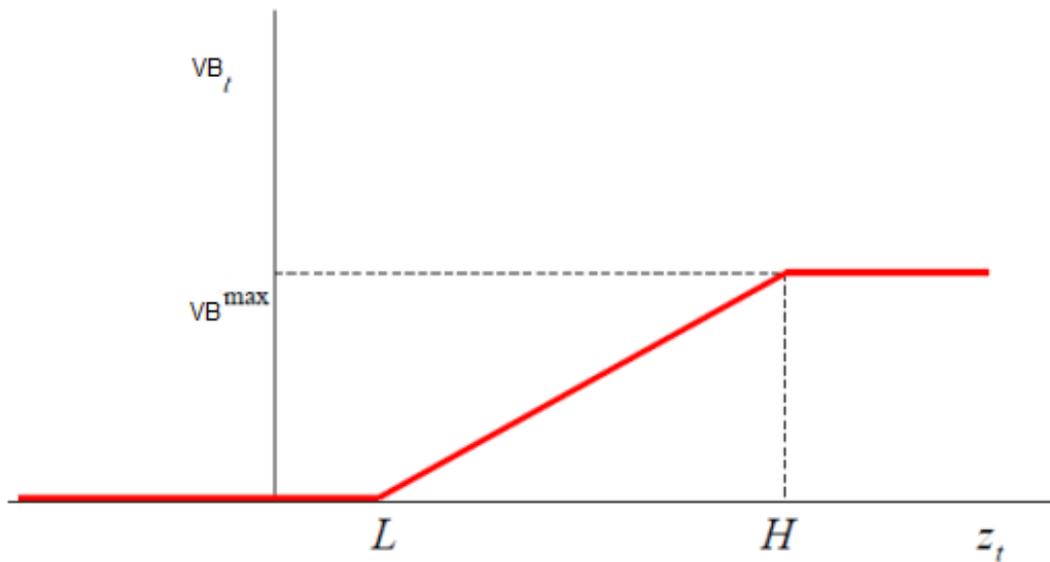
iii) Transform the credit-to-GDP gap into the CCB add-on:

The size of the buffer add-on (VB_t), in percentage of RWAs, shall be zero when GAP_t is below a threshold level L , which shall be equal to 2. It then increases with the GAP_t until the buffer reaches its maximum level (VB^{max}), when the GAP exceeds an upper threshold H , which shall be equal to 10.

[in notational form]

$$\begin{aligned}
 VB_t &= 0 && \text{if } z_t < L \\
 VB_t &= \{(z_t - L) / (H - L)\} \times VB^{\max} && \text{if } L \leq z_t \leq H \\
 VB_t &= VB^{\max} && \text{if } z_t > H
 \end{aligned}$$

Where: $L = 2\%$, $H = 10\%$ and $VB^{\max} = 2.5\%$ of RWAs



Role of the Supervisory Authority

5. After the implementation of the CCyB at a specified level, in a stressed economic environment supervisory authorities should manage their use of the CCyB in order to ensure that the credit supply is not inhibited by the regulatory capital requirements. Depending on the conditions of credit supply in the jurisdiction, the CCB can be released either gradually or more rapidly. The CCyB can be released gradually when credit growth slows down and systemic risk reduces in a smooth manner. In other situations, given that credit growth can be a lagging indicator of stress, the CCyB could be released rapidly to ensure that the supply of credit in the jurisdiction is not unduly restricted by capital requirements. Supervisory authorities may also choose to release the CCyB concurrently with the publication of the financial results of the banking system, so that a reduction in the CCyB can accommodate losses of capital or, alternatively, accommodate increases in financing by IIFS.

6. When supervisory authorities decide to release the CCyB rapidly, they can also specify the duration of release. This will help to reduce the uncertainty for IIFS and other banks regarding future supervisory actions relating to the CCyB. It will also provide comfort to them to know that the released capital requirement can be used to accommodate losses of capital. Supervisory authorities shall review,

update and publicly disseminate information about the future outlook regarding the CCyB – for example, on a quarterly basis. This will help IIFS, other banks, authorities in other jurisdictions and other stakeholders to build an understanding of the buffer decisions taken by the supervisor.

7. With the release of the CCyB down to zero, the capital so released as surplus would in principle be available for distribution or other uses without restriction. IIFS or other banks may choose to use the released capital to accommodate losses or to protect themselves against any future unexpected losses. Supervisory authorities may, however, use their discretion to impose any restrictions on the use or distribution of the released capital, if circumstances so demand.

8. Supervisory authorities should be cautious about some potentially unintended consequences of introduction or release of the CCyB, and should take appropriate steps through their communication strategies to minimise such impacts. The dangers resulting from, or aggravated by, inadequate communication may include:

(i) IIFS and other banks may already have in their pipeline a set of approved credits and commitments for expansion of credit which cannot be easily withdrawn. In that case, customers may rush to draw down their credit lines in the expectation of tightening credit conditions and increased costs, thereby creating a sudden increase in credit demand.

(ii) Financial markets may react negatively to the imposition of a CCyB, particularly if the basis of determination is unclear and the buffer is unexpected. The decision may be perceived negatively, as a signal that the supervisor is anticipating a credit bubble in that jurisdiction or banking sector, thereby creating a systemic risk of withdrawals.

(iii) The release of the buffer may also be perceived negatively as a signal that the supervisor is expecting losses in a particular market, thereby increasing systemic risk.

Additional Metrics and Indicators

9. In the previous section, guidance has been provided on the use of a credit-to-GDP ratio for the application and release of the CyB in each jurisdiction. As highlighted by the Basel Committee on Banking Supervision, this indicator has been chosen due to a number of advantages for the purpose of predicting a period of excess credit growth. This ratio tends to rise smoothly well above the trend before the most serious episodes of financial stress. There have been a number of benefits from using this ratio instead of using a simple measure of credit growth in the economy:

(i) The ratio is normalised by the size of the economy and, thus, is not influenced by the normal cyclical patterns of credit demand.

(ii) A credit-to-GDP gap allows for calculating a financial deepening trend,¹⁹⁵ due to being measured as a deviation from a long-term trend.

(iii) It is smoother than a variable calculated as differences in levels, such as credit growth.

¹⁹⁵ Financial deepening is a process which states that credit typically grows more quickly than GDP as an economy develops.

- (iv) It minimises spurious volatility; that is, there are no large quarter-to-quarter swings.
- (v) It addresses directly the CCyB's objective to protect the banking sector from periods of excess credit growth.

10. Notwithstanding the above, use of the credit-to-GDP indicator and the consequent decisions related to the application and release of CCyB requires extra caution and vigilance on the part of supervisory authorities for various reasons, such as:

- (i) The rise in the ratio may be due to a cyclical slowdown or outright decline in GDP.
- (ii) Conversely, the ratio might decline due to a rise in the GDP as a result of high commodity prices – for example, in oil- and gas-based economies, high oil and gas prices can sharply reduce the indicator – which would be unrelated to the economic fundamentals related to the growth of credit and output in the economy.
- (iii) The calculated long-term trend of this ratio is a purely statistical measure that does not capture turning points well.
- (iv) Ex-post revisions of GDP estimates may change the trend and the resultant gap, making the decisions related to the CCyB prone to reconsideration.
- (v) End-of-sample estimates¹⁹⁶ of the trend may be unreliable.
- (vi) Credit growth can be a lagging indicator of stress; therefore, in downturns, a credit-to-GDP indicator continues to increase due to a greater demand for credit by firms and households notwithstanding slower GDP growth.
- (vii) The indicator does not take into account the mechanisms used to restrict the growth in demand for credit and to manage it.
- (viii) Credit growth might not be an issue where there is an expansion of demand for credit – for example, in the case of emerging economies.
- (ix) Being a lagging indicator, it may not be an appropriate indicator in a phase when the CCB is being released.

11. In view of the above, the credit-to-GDP gap indicator may have certain drawbacks and may not transmit the right signals in all circumstances concerning the build-up, and especially the release, of the CCyB. In this regard, it is advisable for supervisory authorities not to apply the benchmark in a mechanical way. This metric should be accompanied by other indicators of systemic risk both of a national and an international origin, some of which are outlined in the following paragraphs. Relying on

¹⁹⁶ When a sample of data has a short duration – that is, the number of observations is relatively small in the sample over the period for which the data was collected or drawn from a population – the sample is called *end-of-sample data*. This sort of sample is mainly contained in time series data, generated on a regular basis indexed by time epoch. The major point of interest is the stability of the data collected over such a short duration – that is, the consistency of the sample estimates – and whether or not they can be used for inference (forecasting or prediction) on to the whole population, particularly in financial time series data. Normally, end-of-sample data, due to its short duration, generates bias in its sample estimates; thus, this *bias* is called *end-of-sample bias*.

a suite of indicators for macroprudential regulation instead of a single indicator would also make it more difficult for IIFS and other banks to evade new regulatory requirements. Depending on the specificities of the jurisdiction, the following indicators could be useful in informing authorities in their decisions as to whether and when IIFS and other banks should build up or release capital buffers. Since not meeting capital adequacy requirements by an IIFS or other bank can result in the imposition of restrictions on capital distributions in the form of dividends, share repurchases, and especially discretionary bonus payments to staff, supervisory authorities should be wary of the tendencies of these institutions to reduce credit instead.

12. *GDP*: Both nominal and real GDP, or key sectoral components thereof, can provide guidance on the various phases of business cycles in the economy. Though business and financial cycles are related, fluctuations in output have a higher frequency than those of financial cycles associated with serious financial distress. Episodes of financial distress are rare and reflect longer and larger cycles in credit and asset prices. However, in emerging markets, this measurement may be a useful tool for supervisory authorities to monitor in order to detect any system-wide heating-up of the economy. In some other cases, gross national income (GNI) might be a useful tool for evaluating the economic strength of a country, instead of looking at overall economic output at the jurisdiction level only.

13. *Asset prices*: Deviations of property and equity prices from trend can help to identify the build-up phase, especially for IIFS which normally invest some part of their funds in these asset classes. However, the deviations tend to narrow way ahead of the emergence of financial strains, suggesting that this might result in starting to release the buffer too early. On the whole, the past performance of such prices could be useful in helping authorities to assess and explain the need to release the buffer after the financial system comes under stress.

14. *Credit process*: Supervisory authorities may also monitor the credit-granting process by the IIFS and other banks in the jurisdiction, as lax credit provision is a key cause of asset price bubbles.

15. *Bank profits*: The performance of pre-tax bank profits as a signal for the build-up in good times varies from jurisdiction to jurisdiction. However, from historical data, supervisory authorities may gauge the suitability of this indicator for their jurisdictions.

16. *Gross bank losses*: Proxies for gross bank losses do not perform well in building up buffers in good times. The reason is that the simple absence of losses in good times does not differentiate between magnitudes of losses during various phases of good times. Building up the buffer on the absence of losses would tend to call for very high buffers early on in the expansion.

17. *Loan loss provisioning*: The gross loan loss provisioning being made by IIFS and other banks in the jurisdiction may indicate the build-up of system-wide stress.

18. *Stress testing*: IIFS and other banks are required to conduct stress tests as a part of their capital planning process. Stress scenarios can envisage a severe cyclical downturn, possibly as a result of excessive credit growth, and consider whether the firms have sufficient capital to meet these shocks.

Similarly, supervisory authorities can conduct macro-level stress testing¹⁹⁷ which can include scenarios relating to excessive credit growth in the economy, the results of which can provide a lead to take CCyB-related decisions.

19. *Public debt:* This tends to fall in good times, and to increase in periods of economic weakness, due to the cyclical properties of fiscal policy. However, supervisory authorities may study the behaviour of public debt as one of the indicators, as excessive growth in public debt can contribute to a growth in financial system-wide risk.

20. *Business models of the banks:* Though the CCyB regime suggests a universal application of the buffer to all types of IIFS and other banks, the risk of credit growth may be very different depending on the business model being applied by the institutions concerned. Therefore, the study of the business model of a particular type of IIFS or other bank, its impact on credit growth, and its overall contribution to building up system-wide risks could be helpful for supervisory authorities in making decisions about the use of the CCyB and/or other macroprudential tools to stabilise the underlying risk.

21. *Sectoral issues:* Supervisory authorities should have specific macroprudential policy instruments at hand that would allow them to address sector-specific issues as well, such as by: (a) setting specific capital requirements or increasing risk weights at a sectoral, as well as the aggregate level, if necessary; and (b) establishing specific requirements for those types of exposure which, in a given situation, may lead to the destabilisation of the financial market and macroeconomic imbalances.¹⁹⁸

22. *Other measures under the supervisory review process:* CCyB is one of the many tools for macroprudential supervision that can be used by supervisory authorities. During the build-up phase of system-wide stress, as supplementary measures, supervisory authorities may make use of some other indicators or steps, such as:

- increasing the financing-to-value (FTV) ratio;
- imposing an additional capital charge on an individual IIFS or group of IIFSs, under the supervisory review process;
- studying funding spreads and taking steps to control their direction;
- conducting credit condition surveys;
- studying data on the ability of non-financial entities to meet their financial obligations on a timely basis;
- adjusting payment-to-income (PTI) ratios;¹⁹⁹ and
- tightening financing margins and collateral requirements.

¹⁹⁷ See, for details, principle 4.3 of IFSB-13 entitled “designing and implementing system-wide stress tests and specific scenarios”.

¹⁹⁸ Such a situation could occur, for example, when the only category of financing found to be growing excessively would be real estate financing in foreign currencies. Excessive growth in this category could lead to speculative bubbles in the markets for real estate assets, weaken the effectiveness of monetary policy, and constitute an additional risk factor for the stability of financial markets and the economy.

¹⁹⁹ It is the ratio of monthly payments (against financing) to monthly income that provides a measure of the ability of the customer to service the financing on a monthly basis.

Other Issues Relating to the CCyB

Domestic versus international banks

23. Jurisdictional reciprocity will be applied in the case of internationally active IIFS. The host authorities take the lead in setting the buffer requirement that would apply to credit exposures held by local entities located in their jurisdiction. They would also be expected to inform promptly their foreign counterparts regarding buffer decisions, so that the authorities in the other jurisdictions could require their IIFS to respect them. Meanwhile, the home authorities will be responsible for ensuring that the IIFS they supervise correctly calculate their buffer requirements based on the geographic location of their exposures. The home authorities will always be able to require that the IIFS they supervise maintain higher buffers if they judge the host authorities' buffer to be insufficient. However, the home authorities should not implement a lower buffer add-on in respect of their IIFSs' credit exposures to the host jurisdiction. In cases where IIFS have exposures to jurisdictions that do not operate and publish buffer add-ons, the home authorities will be free to set their own buffer add-ons for exposures to those jurisdictions.

24. The CCyB regime will have different impacts on domestic and internationally active institutions. In particular, internationally active banks are, on average, expected to face a more stable buffer requirement over time, given the broad geographic diversification of their portfolios and the proposed weighting mechanism applied to the buffer add-ons. At the same time, domestically active banks will be exposed to the buffer requirements of their respective jurisdictions, which may either be higher or lower than the above-mentioned "internationally weighted average". Overall, the essence of the mechanism is that the buffer requirements will depend on the geographical orientation of banks' portfolios, and not on the location of the banks' establishments that generate the exposures. In this regard, the CCyB is neutral with respect to the nationality of the originating institution and thus ensures a level playing field for domestic and foreign banks.

1.11.1.1 Ceiling for the CCyB

25. Setting a ceiling for the CCyB might have certain drawbacks in cases when excessive credit growth continues at a national level despite the application of the CCyB. In such situations, the ongoing credit expansion could raise concerns from a financial stability perspective, while, at the same time, the ceiling could unduly limit the powers of authorities to intervene. Therefore, supervisory authorities can apply a higher CCyB requirement for IIFS and other banks in their jurisdiction. In this case, however, the international reciprocity provisions apply to the CCyB only up to the maximum of 2.5%. In particular, a local buffer beyond the 2.5% cap used as a last resort option to curb excessive credit expansion could discriminate against local IIFS and other banks vis-à-vis foreign entities. Therefore, the possible application of the buffer above the 2.5% ceiling will require a coordinated policy action by the respective supervisory authorities.

1.11.1.2 Supervisory disclosure related to the CCyB

26. Supervisory authorities should develop a communication strategy before taking on the task of publicly explaining buffer decisions. Once they have implemented their communication strategies, providing regular updates on their assessment of the macrofinancial situation and the prospects for potential buffer actions is a useful way of preparing banks and their stakeholders for buffer decisions. In turn, that should help to smooth the adjustment of financial markets to those actions, as well as giving IIFS and other banks as much time as possible to adjust their capital planning accordingly. When there are significant changes to the supervisors' outlook for the prospect of changes to the CCyB, communications may be conducted on an "as needed" basis to explain buffer actions and to advise IIFS and other stakeholders promptly.

27. To enable accountability, national authorities should disclose publicly their respective national decisions and the underlying reasoning. In particular, given that the choice of indicators to be used for the application and release of the CCyB could be quite wide, it is of paramount importance that buffer decisions be clearly explained to market participants in order to enhance the credibility of the buffering mechanism. Transparency on decisions for the CCyB is of particular importance to ensure that the CCyB is indeed drawn upon in the event of a downturn and does not constitute a new level of permanent minimum requirements. Public communication is necessary to avoid misinterpreting the decline in the total level of capital and penalising banks that use their CCyB. A communications strategy can also help to promote a clear distinction between macroprudential decisions on the CCyB and microprudential decisions on the capital of individual institutions, ensuring that the macroprudential reasons for buffer requirements are well understood.

1.11.1.3 Application to Islamic investment banks

28. As a general principle, it is the activity of a given IIFS, rather than its legal form, that should be the deciding criterion in the application of the CCyB. In this context, all IIFS which are active in the provision of credit should be treated in the same way by the CCyB mechanism. Therefore, to the extent that Islamic investment banks provide credit to their customers, they should be subject to the CCyB, both to ensure that they can maintain financing in the event of shocks – at the time of release of the CCyB – and to ensure a level playing field with their competitors in credit supply – that is, IIFS and other banks.

Appendix D: Supervisory Slotting Criteria for *Istisnā`* in Project Finance and *Mushārah* in a Business Venture

	Strong	Good	Satisfactory	Weak
Financials				
Market conditions	Few competitors or substantial and durable advantage in location, cost or technology Demand is strong and growing	Few competitors or better-than-average location, cost or technology, but this situation may not last Demand is strong and stable	Project/business venture has no advantage in location, cost or technology Demand is adequate and stable	Project/business venture has worse-than-average location, cost or technology Demand is weak and declining
Financial ratios	Strong financial ratios considering the level of project/business venture risk; very robust economic assumptions	Strong to acceptable financial ratios considering the level of project/business venture risk; robust project/business venture economic assumptions	Standard financial ratios considering the level of project/business venture risk	Aggressive financial ratios considering the level of project/business venture risk

Stress analysis	The project/business venture can meet its financial obligations under sustained, severely stressed economic or sectoral conditions	The project/business venture can meet its financial obligations under normal stressed economic or sectoral conditions. The project/business venture is only likely to default under severe economic conditions	The project/business venture is vulnerable to stresses that are not uncommon through an economic cycle, and may default in a normal downturn	The project/business venture is likely to default unless conditions improve soon
Financing Structure				
Duration of the contract compared to the duration of the project/business venture	Useful life of the project/business venture significantly exceeds tenor of the financing contract	Useful life of the project/business venture exceeds tenor of the financing contract	Useful life of the project/business venture exceeds tenor of the financing contract	Useful life of the project/business venture may not exceed tenor of the contract
Payment structure of selling price <i>(Note: Applicable to istisnā` only)</i>	Partly in advance and in instalments	Instalments	Instalments with limited bullet payment	Bullet payment or in instalments with balloon structure (higher instalment amounts towards end of the contract)
Political and Legal Environment				

Political risk, including transfer risk, considering project/business venture 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
Force majeure risk (war, civil unrest, etc.)	Low exposure	Acceptable exposure	Standard protection	Significant risks, not fully mitigated
Government support and project/business venture's importance for the country over the long term	Project/business venture of strategic importance for the country (preferably export-oriented) Strong support from government	Project/business venture considered important for the country Good level of support from government	Project/business venture may not be strategic but brings unquestionable benefits for the country Support from government may not be explicit	Project/business venture not key to the country No or weak support from government
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/business venture
Acquisition of all necessary supports and approvals for	Strong	Satisfactory	Fair	Weak

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 of actual enforcement of contracts, collateral and security
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
Construction Risk				
<i>(for project finance only)</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
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

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
-----------------------	--	--	---	---

Appendix D: Supervisory Slotting Criteria for *Istisnā`* in Project Finance and *Mushārah* in a Business Venture

	Strong	Good	Satisfactory	Weak
Construction Risk				
<i>(for project finance only) (cont'd)</i>				
Track record and financial strength of contractor in constructing similar project/business ventures	Strong	Good	Satisfactory	Weak
Operating Risk				
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

Operator's expertise, track record and financial	Very strong or committed technical assistance of the sponsors	Strong	Acceptable	Limited/weak, or local operator dependent on local authorities
--	---	--------	------------	--

Appendix D: Supervisory Slotting Criteria for *Istisnā`* in Project Finance and *Mushārah* in a Business Venture

	Strong	Good	Satisfactory	Weak
Off-take Risk				
<i>(for project finance only)</i>				
(a) If there is a take-or-pay or fixed-price off-take contract	Excellent creditworthiness of off-taker; strong termination clauses; tenor of off-take contract comfortably exceeds the maturity of the financing contract	Good creditworthiness of off-taker; strong termination clauses; tenor of off-take contract exceeds the maturity of the financing contract	Acceptable financial standing of off-taker; normal termination clauses; tenor of off-take contract generally matches the maturity of the financing contract	Weak off-taker; weak termination clauses; tenor of off-take contract does not exceed the maturity of the financing contract
(b) If there is no take-or-pay or fixed-price off-take contract	Project produces essential services or a product 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 product sold widely on a regional market that will absorb it at projected prices even at historical growth rates	Product is sold on a limited market that may absorb it only at lower than projected rates	Project output is demanded by only one of a few buyers or is not generally sold on a organised market
Supply Risk				
<i>(for project finance only)</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

Appendix D: Supervisory Slotting Criteria for *Istisnā`* in Project Finance and *Mushārah* in a Business Venture

	Strong	Good	Satisfactory	Weak
Supply Risk (cont'd) <i>(for project finance only)</i>				
Reserve risks (e.g. 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 well in excess of requirements over lifetime of the project	Proven reserves can supply the project adequately through the maturity of the financing contract	Project relies to some extent on potential and undeveloped reserves
Strength of Sponsor				
Sponsor's (or partner's, in the case of <i>mushārah</i>) track record, financial strength and	Strong sponsor (partner) with excellent track record and high financial standing	Good sponsor (partner) with satisfactory track record and good financial standing	Adequate sponsor (partner) with adequate track record and good financial standing	Weak sponsor (partner) with no or questionable track record and/or financial weaknesses
Sponsor's (or partner's, in the case of <i>mushārah</i>) support, as evidenced by equity, ownership clause and incentive to inject additional cash if necessary	Strong. Project/business venture is highly strategic for the sponsor (partner) – i.e. core business and long-term strategy	Good. Project/business venture is strategic for the sponsor (partner) – i.e. core business and long-term strategy	Acceptable. Project/business venture is considered important for the sponsor (partner) – i.e. core business	Limited. Project/business venture is not key to sponsor (partner)'s long-term strategy or core business

Appendix D: Supervisory Slotting Criteria for *Istisnā`* in Project Finance and *Mushārah* in a Business Venture

	Strong	Good	Satisfactory	Weak
Security Package				
Assignment of contracts and accounts*	Fully comprehensive	Comprehensive	Acceptable	Weak
Pledge of assets, taking into account quality, value and liquidity of assets*	First perfected security arrangement in all project assets, contracts, permits and accounts necessary to run the project	Perfected security arrangement in all project assets, contracts, permits and accounts necessary to run the project	Acceptable security arrangement in all project assets, contracts, permits and accounts necessary to run the project	Little security or collateral for IIFS; weak negative pledge clause
IIFS' control over cash flow (e.g. independent escrow accounts)	Strong	Satisfactory	Fair	Weak
Reserve funds (payment of selling price in <i>istisnā`</i> , O&M, renewal and replacement, unforeseen events, etc.)	Longer than average coverage period, all reserve funds fully funded in cash	Average coverage period, all reserve funds fully funded in cash	Average coverage period, all reserve funds fully funded in cash	Shorter than average coverage period, reserve funded from operating cash flows

*In *mushārah*, the collateralisation of underlying assets is restricted to losses arising from negligence and misconduct cases only.

Appendix E: Supervisory Slotting Criteria for Diminishing *Mushārah* in Real Estate

	Strong	Good	Satisfactory	Weak
Financial Strength				
Market conditions	The supply and demand for the business venture's type and location are currently in equilibrium. The number of competitive properties coming to market is equal to or lower than forecasted demand.	The supply and demand for the business venture'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 business venture's design and capabilities may not be state of the art compared to new project business ventures.	Market conditions are weak. It is uncertain when conditions will improve and return to equilibrium. The business venture is losing tenants at <i>ljārah</i> /lease expiration. New <i>ljārah</i> /lease terms are less favourable compared to those expiring.
Stress analysis	The property's resources, contingencies and liability structure allow it to meet its financial obligations during a period of severe financial stress.	The property can meet its financial obligations under a sustained period of financial stress. 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.

Appendix E: Supervisory Slotting Criteria for Diminishing *Mushārah* in Real Estate

	Strong	Good	Satisfactory	Weak
Cash-Flow Predictability				
(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 (such as 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 in preparing space for new tenants.
(b) For complete but not stabilised property	Leasing activity meets or exceeds projection. The business venture 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.

Appendix E: Supervisory Slotting Criteria for Diminishing *Mushārah* in Real Estate

	Strong	Good	Satisfactory	Weak
(c) For construction phase	The property is entirely pre-leased through the tenor of the contract or pre-sold to an investment-grade tenant or buyer.	The property is entirely pre-leased or pre-sold to a creditworthy tenant or investor.	Leasing activity is within projections but the building may not be pre-leased. The IIFS may be the permanent investor.	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.
Asset Characteristics				
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 its difficulties.
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.

Appendix E: Supervisory Slotting Criteria for Diminishing *Mushārah* in Real Estate

	Strong	Good	Satisfactory	Weak
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.	Business venture is over budget or unrealistic given its technical hazards. Contractors may be underqualified.
Strength of <i>Mushārah</i> Partner(s)				
Financial capacity and willingness to support the property.	The partner has substantial resources and limited direct and contingent liabilities.	The partner's financial condition allows it to support the property in the event of a cash-flow shortfall.	The partner is average to below average in financial resources.	The partner lacks capacity or willingness to support the property.
Reputation and track record with similar properties	Experienced management and high partner's quality. Strong reputation and lengthy and successful record with similar properties.	Appropriate management and partner's quality. The partner or management has a successful record with similar properties.	Moderate management and sponsors' quality. Management's or sponsor's track record does not raise serious concerns.	Ineffective management and substandard partners' quality. Management and partner difficulties have contributed to difficulties in managing properties in the past.
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.
Divestment and Liquidation				
Legal infrastructure	Legally enforceable to sell/liquidate the property.	Legally enforceable to sell/liquidate the property.	Legally enforceable to sell/liquidate the property.	Ability to sell/liquidate the property is constrained and time consuming.

Quality of the <i>takāful</i> or insurance coverage	Appropriate	Appropriate	Appropriate	Substandard
---	-------------	-------------	-------------	-------------

Appendix F: Factors in Determining Domestic Systemically Important Banks

1. As mentioned in [section 2.6.3](#), supervisory authorities should decide the broad category of factors that will be used for assessing the impact of the failure of a domestic systemically important bank (D-SIB). Supervisory authorities can use, inter alia, some or all of the four factors mentioned below. For each factor, a number of possible indicators have been mentioned which can be used by supervisory authorities as a measure of the relevant factor.

(a) Size

2. The size of a bank is central for its significance in the financial system, as its size indicates the extent of financial services supplied by the institution to the real economy and the financial system. Any possible damaging effects in the form of risks for the economy (negative externalities) if a bank fails are likely to increase more than proportionally with the size of the institution. If a large institution fails, this may, to a greater extent than for smaller institutions, damage public confidence in the financial system as a whole.²⁰⁰

3. The size of a bank can be measured in several ways. Some possible measures include:

- *Total assets.*
- *Total exposure*, as measured for leverage ratio in [section 2.4.3.2](#).
- *Market shares within systemically important business areas (deposits, financing and clearing).*
- *Size of total assets in relation to gross domestic product (GDP):* If a bank is relatively large in size compared to the domestic GDP, it can be identified as a D-SIB, whereas a same-sized bank in another jurisdiction that is smaller relative to the GDP of that jurisdiction may not be identified as a D-SIB.
- *Risk-weighted assets (RWAs) as a percentage of GDP:* RWAs express the risks relating to the bank's specific activities and may reduce any overrating of how systemic the bank is, as low-risk items may be included in the total assets of the institution. The downside is that the RWAs may change due to increased use of internal models without a corresponding change in how systemic the institution is.
- *Value of uncovered deposits/unrestricted profit-sharing investment accounts (PSIA):* Deposits/unrestricted PSIA not covered by a Sharī'ah-compliant deposit guarantee scheme or an equivalent scheme must be expected to suffer losses in connection with a winding-up, and for households and enterprises such losses may limit their consumption and investments, and ultimately mean that they are not capable of fulfilling their obligations. At the same time, if more households and enterprises suffer losses in connection with a winding-up, this creates more uncertainty and general lower confidence in the banks. This may give rise to financial instability and limit the possibility that the sector will provide the services that it is expected to deliver, and thus also restrict economic activity. The relevant indicator for deposits is deemed to be the size of the deposits in relation to the sector's overall deposits, as this expresses the relative size of the institution and also the potential consequences of a winding-up.

(b) Interconnectedness

²⁰⁰ Arguably also small institutions may have systemic importance if they encounter difficulties at the same time. However, deposit insurance schemes and other measures by supervisory authorities can help make the damage control a little easier than those of systemically important significance.

4. Interconnectedness means that problems in a bank may spread to the rest of the sector – for example, as a consequence of contractual obligations between the financial institutions. The interconnectedness of a bank with the rest of the financial system may, for example, pose a risk that winding-up the institution reduces the loss-absorbing capacity of the rest of the sector due to losses on exposures incurred by the D-SIB. This could be in the form of unsecured and secured financing, *sukūk* portfolios, etc., which limit the total credit supply of the sector and thus, potentially, economic growth.

5. To assess the interconnectedness of a bank with the rest of the financial system, the following indicators can be considered:

- intra-financial system assets;
- intra-financial system liabilities;
- wholesale funding ratio;
- financing to financial institutions (secured);
- financing to financial institutions (unsecured);
- financing/deposits from financial institutions;
- investment securities held;
- financing-to-deposit ratio;
- intra-group exposures; and
- importance of the institution in secured interbank market.

(c) Substitutability/financial institution infrastructure

6. In emerging markets, most banking institutions, including IIFS, undertake financing as their core business activity. Financing comprises activities which can be difficult or impossible for other banks to take over or replace in the short term. In order to be able to provide financing, the bank must have sufficient liquidity and capital to meet the statutory requirements even after having provided the financing; and, in relation to some customer or product segments, highly specialised credit expertise. It is likely that the larger the financing portfolio, the more difficult it will be to take the portfolio over from other institutions. Extensive losses and subsequent winding-up of a D-SIB may therefore result in limitation of the financing capacity in the sector, which will mostly be noticeable in terms of new financing. This may limit economic growth. Therefore, financing is considered difficult to substitute and to be of particularly significant systemic character. Some other measures that can be considered in this context include:

- market share of financing to various sectors of the economy;
- assets under custody;
- payments cleared and settled through payment systems;
- values of underwritten transactions in debt and equity markets;
- financing to households;
- financing to non-financial corporations;
- financing to the general government;
- financing to community service and non-profit organisations; and

- international payments, clearing and advisory services.

(d) Complexity

7. A bank's systemic importance will be higher if its business model, structure and operations make it particularly costly to wind up. The winding-up of complex institutions is likely to generate higher costs than winding-up of less complex institutions, and will therefore, all else being equal, have a greater impact on financial stability and economic development. Factors which complicate winding-up may include the scope of over-the-counter (OTC) trading of *sukūk*, large trading portfolios, or the fact that the institution has many assets in its balance sheet which have not been measured at market value and thus may prove to have a significantly different realisable value. Finally, the costs of winding-up an institution with significant cross-border activities will increase operational risks and put pressure on the time aspects of crisis management because of the need for coordination between national authorities.

8. The complexity of a credit institution is very closely linked to the size of the institution, as the large institutions, in particular, will also be the most complex in relation to the organisation, business model, etc. Accordingly, some possible indicators for complexity include:

- OTC trading of *sukūk* notional value;
- held for trading and available for sale securities;
- investment securities;
- trading book exposure;
- the risk profile of the institution; and
- number of jurisdictions.

(e) Country-specific factors

9. Various jurisdiction-specific factors may be considered by supervisory authorities, in addition to those already mentioned. One such indicator is the degree of concentration in the banking sector or the size of the banking sector relative to GDP. Specifically, countries that have a larger banking sector relative to GDP are more likely to suffer larger direct economic impacts of the failure of a D-SIB than those with smaller banking sectors. While size-to-GDP is easy to calculate, the concentration of the banking sector could also be considered, as a failure in a medium-sized highly concentrated banking sector would likely create more of an impact on the domestic economy than if it were to occur in a larger, more widely dispersed banking sector.