

The New DFSA Prudential Framework

Agenda

1. Overall Themes and Key Changes
2. Capital Requirements and Implications
3. Credit Risk
4. Operational Risk
5. Market Risk
6. Interest Rate Risk
7. Liquidity Risk
8. Group Risk
9. Public Disclosure Requirements
10. Supervisory Review and Evaluation Processes

Objectives of PIB Module Review

Improve risk management standards for all Firms

Address existing gaps to be a more effective supervisory tool

Implement Basel III

Overall Approach to PIB Review

Minimise Basel III's impact on non-banking Firms

Enhance risk management standards for banking and non-banking Firms

Improve compliance with Basel Core Principles

Key Policy Changes

Remove of Risk Capital Requirements for Asset Managers, Custodians and Trust Service Providers

Require Capital to be held in Liquid Assets

Improve quality of Capital and Individual Capital Requirement ('ICR') for banks

Change to the Credit Risk calculation methodology

Include Operational Risk requirements

Introduce internal risk assessment requirement for non-banking firms

Capital Requirements and Implications

Prudential Categories

Category 1

- Accepting Deposits

Category 2

- Providing Credit
- Dealing in Investments as Principal

Category 3A

- Dealing in Investments as Matched Principal
- Dealing in Investments as Agent

Category 3B

- Providing Custody for a Fund
- Acting as Trustee of a Fund

Category 3C

- Managing Assets
- Managing a Collective Investment Fund
- Managing Restricted PSIAs
- Providing Custody (*other than for a Fund*)
- Providing Trust Services

Prudential Categories

Category 4

- Arranging Credit or Deals in Investments
- Advising on Financial Products or Credit
- Arranging Custody
- Insurance Intermediation
- Insurance Management
- Operating an Alternative Trading System
- Providing Fund Administration
- Providing Trust Services

Category 5

- Managing Unrestricted PSIAs

Capital Requirements

Prudential Category	Base Capital Requirement (in USD)	Risk Capital Requirement	Expenditure Based Capital Requirement (‘EBCM’)
Category 1	10,000,000	✓	✗
Category 2	2,000,000	✓	✓
Category 3A	500,000	✓	✓
Category 3B	4,000,000	✗	✓
Category 3C	500,000	✗	✓
Category 4	10,000	✗	✓
Category 5	10,000,000	✓	✗

Capital Requirements

➤ Risk Capital Requirement

Risk Capital Requirement

=

$$\begin{array}{ccccc}
 \text{Credit Risk} & & \text{Market Risk} & & \text{Operational Risk} \\
 \text{Capital} & + & \text{Capital} & + & \text{Capital} \\
 \text{Requirement} & & \text{Requirement} & & \text{Requirement}
 \end{array}$$

➤ Expenditure Based Capital Requirement ('EBCM')

Prudential Category	No Client Assets or Insurance Money	Client Assets or Insurance Money
Categories 2, 3A, 3B, 3C	13/52	18/52
Category 4	6/52	18/52

Capital Components

Common Equity Tier 1 Capital (‘CET1’)

Permanent, fully paid up, perpetual

- Share capital
- Share premium
- Retained earnings

Additional Tier 1

Issued and fully paid up

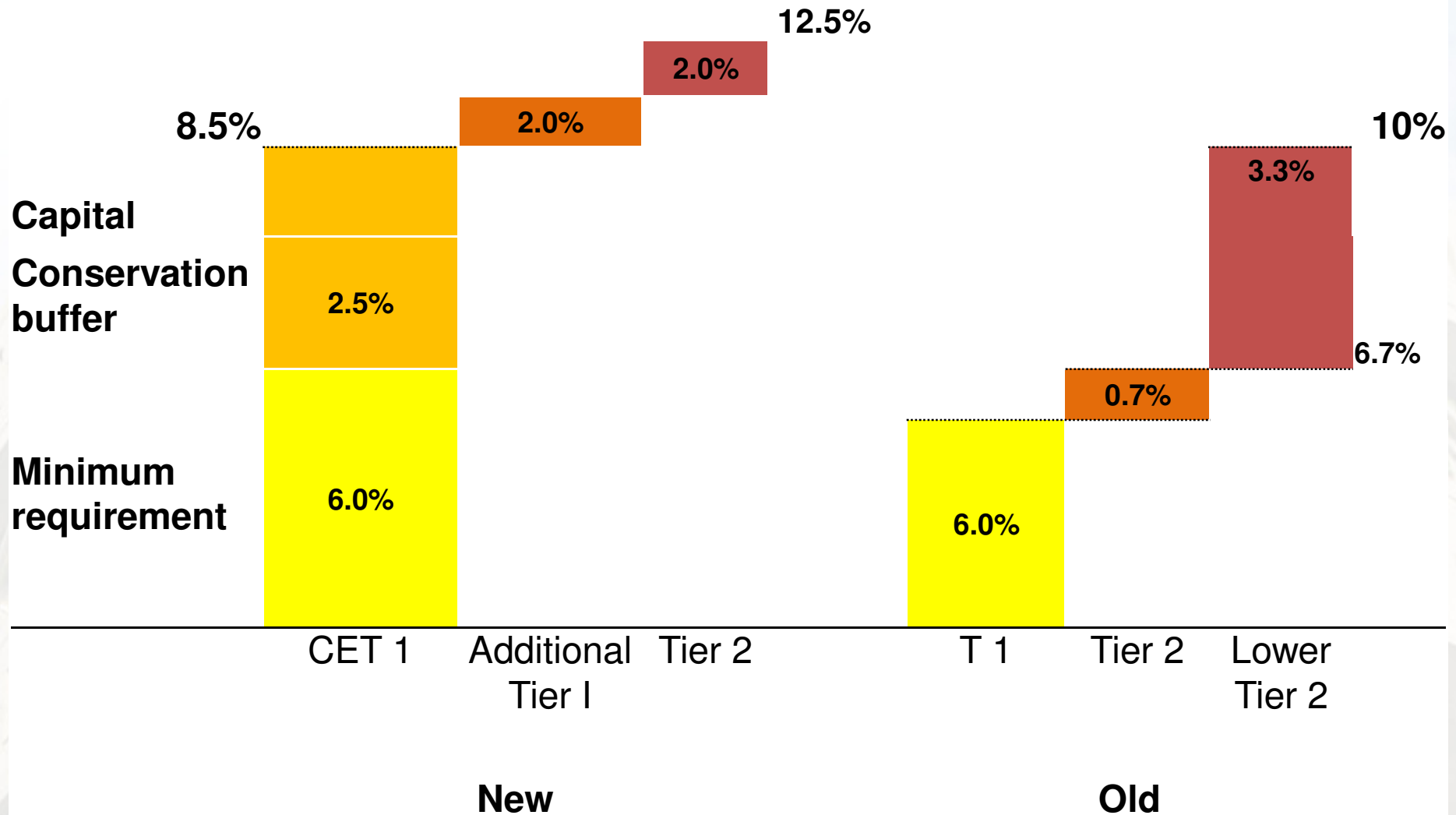
- Subordinate to Tier 2
- Perpetual
- May have callable option

Tier 2 Capital

Fully paid up

- Maturity at least 5 years
- Subordinate

Capital Resources



Capital Conservation Buffer

- Required as 25% of Firms Risk Capital Requirement
- Must be CET 1
- If Firm does not meet Capital Conservation Buffer ('CCB') there are conditions on:
 - Distributions
 - Bonuses
 - Payments on capital instruments
- Capital conservation plan

Capital Resources – Structure

	Reference to PIB Rules
(A1) Elements of Common Equity Tier 1 (CET1) Capital	Rule 3.13.2 and section 3.16
(A2) Adjustments to/deductions from CET1 Capital	Rules 13.3.5 and 13.3.7
(A3) CET1 Capital = A1 – A2	Rule 3.13.1
(A4) Elements of Additional Tier 1 (AT1) Capital	Rule 3.14.3
(A5) Deductions from AT1 Capital	Rule 3.14.4
(A6) AT1 Capital = A4 – A5	Rule 3.14.1
(A7) Tier 1 (T1) Capital = A3 + A6	Rule 3.12.1
(A8) Elements of Tier 2 (T2) Capital	Rule 3.15.3
(A9) Deductions from T2 Capital	Rule 3.15.4
(A10) Tier 2 (T2) Capital = A8 – A9	Rule 3.15.1
(A11) Capital Resources = A7 + A10	Rule 3.11.1

Capital – Implications for Categories 1, 2, 3A and 5 Firms

- Capital Resources – higher quality
- CCB – Capital Conservation Buffer
- CET1, AT1 and T2 capital
- Review usage of Lower Tier 1 ('LT1'), T2 and sub-debt
- Revised methodology for Credit Risk Capital Requirement
- Operational Risk Capital Requirement
- Internal Capital Adequacy Assessment Process ('ICAAP') requirement leading to Individual Capital Requirement ('ICR')

Capital – Implications for Categories 3B and 3C Firms

- Removal of Risk Capital Requirement
- Need to maintain Liquid Assets for EBCM
- Base Capital Requirement ('BCR') = CET1 Capital
- Excess of EBCM over BCR – No limits on type of Capital Resources
- Notification at 120% of Capital Requirement

Capital – Implications for Categories 3B and 3C Firms

- Removal of Concentration Risk limits
- Operational Risk – systems and controls
- Professional Indemnity Insurance ('PII') requirement – except Arranging Custody
- Internal Risk Assessment Process ('IRAP') requirement

Capital – Implications for Category 4 Firms

- Need to maintain Liquid Assets for EBCM
- Base Capital Requirement = CET1 Capital
- Excess of EBCM over BCR can be funded with any type of Capital Resources
- Notification at 120% of Capital Requirement
- Operational Risk – systems and controls
- PII requirement – except Arranging Custody

Example – Category 3C Firm

Firm's parameters

EBCM = 400,000

BCR = 500,000

-
- Capital Requirement = BCR = 500,000
 - CET1 Capital > BCR 500,000
 - Liquid Assets (PIB 3.5.3) > EBCM 400,000
 - In this case, BCR > EBCM. So, no need for capital of lower quality

Example – Category 4 Firm

Firm's parameters

EBCM = 300,000

BCR = 10,000

-
- Capital Requirement = EBCM = 300,000
 - CET1 Capital > BCR 10,000
 - Liquid Assets (PIB 3.5.3) > EBCM 300,000
 - In this case, EBCM > BCR
 - $EBCM - BCR = 290,000$. This can be met with CET1, AT1 or T2 capital – no limits

Key Points – 3A Firms

- New Credit Risk Capital methodology - follow-up session on detailed methodology
- Any voluntary revision in EBCM – must be submitted to DFSA within 7 days for approval
- 1st year of operations – EBCM based on forecast expenditure in business plan submitted with application
- Review any LT1 and T2 capital in old regime – for eligibility under new rules

Key Points – 3B, 3C & 4 Firms

- Liquid assets > EBCM
- Eligibility of Sub-debt for T2 capital
- Notification – Capital Resources falls below 120% of Capital Requirement
- If BCR > EBCM, then hold CET1 = BCR
- If EBCM > BCR, then EBCM – BCR can be met with any type of Capital Resources
- Check for PII cover – annual submission required

Capital – Reporting

	[Year]
FORM B50: Expenditure Based Capital Minimum	
Expenditure Item	
B500_1100 - Total expenses of the AF in the normal course of business exc. exceptional items	
LESS:	
B500_1200 - Staff bonuses	
B500_1300 - Employees and directors shares in profits	
B500_1400 - Other appropriations of profits	
B500_1500 - Shared commissions payable which are directly related to commissions receivable	
B500_1600 - Interest for borrowings made to finance	
B500_1700 - Interest paid to clients on client money	
B500_1800 - Interest paid to counterparties	
B500_1900 - Fees, brokerage and other chgs paid for executing, registering or clearing trans	
B500_2000 - Foreign exchange losses	
B500_2100 - Contributions to charities	
B500_100T - Total expenditure	
B500_3000 - Fraction applied	
B500_300T - Expenditure based capital minimum (based on Actual expenses)	
B500_4000 - Expenditure based capital minimum (as notified to the firm)	
B500_5000 - Total of liquid assets in accordance with PIB rule 3.5.3	
B500_6000 - Liquid assets - EBCM (should be positive)	

Capital – Reporting

	[Year]
FORM B60: Capital Adequacy Schedule	
Capital Resources	
B600_2110 - Elements of Common Equity Tier 1 (CET1) Capital	
B600_2120 - Less: Adjustments to/Deductions from CET1 Capital	
B600_2100 - CET1 Capital	
B600_2210 - Elements of Additional Tier 1 (AT1) Capital	
B600_2220 - Less: Deductions from (AT1) Capital	
B600_2200 - AT1 Capital	
B600_200T - Tier 1 Capital (CET1 + AT1 Capital)	
B600_2310 - Elements of Tier 2 (T2) Capital	
B600_2320 - Less: Deductions from T2 Capital	
B600_2300 - T2 Capital	
B600_2000 - Capital Resources (Tier 1 + Tier 2 Capital)	
Capital Requirement	
B600_2400 - Base Capital Requirement (BCR)	
B600_2500 - Expenditure Based Capital Requirement (EBCM)	
Risk Based Capital Requirement (RBC)	
B600_2610 - Credit and Counterparty Risk Capital Requirement	
B600_2620 - Displaced Commercial Risk	
B600_2630 - Market Risk Capital Requirement	
B600_2640 - Operational Risk Capital Requirement	
Total Risk Based Capital Requirements	
B600_2700 - Capital Requirement - highest of BCR, EBCM and RBC	0
Add - Capital Conservation Buffer (CCB) @ 25% of Capital Requirement -must constitute only CET1 Capital-	
Add - Individual Capital Requirement (ICR)	
B600_265T - Total Capital Requirement	0
B600_2950 - Resources Less Requirement (must be positive)	0

Capital – Reporting

Capital Requirement			
B600_2400 - Base Capital Requirement (BCR)	10		
B600_2500 - Expenditure Based Capital Requirement (EBCM)			
Risk Based Capital Requirement (RBC)			
B600_2610 - Credit and Counterparty Risk Capital Requirement	500		
B600_2620 - Displaced Commercial Risk	0		
B600_2630 - Market Risk Capital Requirement	400		
B600_2640 - Operational Risk Capital Requirement	100		
Total Risk Based Capital Requirements	1000		
B600_2700 - Capital Requirement - highest of BCR, EBCM and RBC	1000		
Add - Capital Conservation Buffer (CCB) @ 25% of Capital Requirement -must constitute only CET1 Capital-	250		
Add - Individual Capital Requirement (ICR)			
B600_265T - Total Capital Requirement	1250		
B600_2950 - Resources Less Requirement (must be positive)	550		

Alan Burke:
Calculated from
activity schedules

Alan Burke:
25% of 1000 Risk
capital requirement

Credit Risk

Credit Risk – Major Changes



Credit Risk – Risk Management

- Applies to Authorised Firms in Categories 1, 2, 3A or 5
- Broaden and provide further detail on risk management practices
- Key requirements:
 - Risk management systems appropriate for Firms scale and complexity
 - Follow principles of good risk management
 - Credit risk strategy, policy and procedures
 - Responsibility lies with senior management and Board
 - Credit assessment and provisioning

Credit Risk – Risk Management

- Introduction of Provisioning Requirements:
 - Firms must have a credit grading methodology
 - Grading mechanism must be capable of identifying problem credits
 - Five broad categories of exposures - including minimum provisioning requirements for domestic Firms

Credit categories	% provision required on unsecured credit
Standard	-
Special Mention	-
Substandard	20%
Doubtful	50%
Loss	100%

Credit Risk – RWA Calculation Methodology

- Change in methodology for calculation of Credit Risk Weights – Standardised Approach ('SA')
- Risk Weights to be assigned on the basis of credit ratings applied by the External Credit Assessment Institutions ('ECAI')
- Use ratings from DFSA recognised ECAI. Mapping is available on the DFSA website
- Simplified Standardised Approach ('SSA') utilises the country ratings as applied by the External Credit Agency approved by the OECD* methodology

* OECD: Organisation for Economic Co-operation and Development

Credit Risk – RWA Calculation Methodology

➤ Example Credit Quality Step mapping table

Credit Quality Step	Fitch's assessment	Moody's assessment	S&P's assessment
1	AAA to AA-	Aaa to Aa3	AAA to AA-
2	A+ to A-	A1 to A3	A+ to A-
3	BBB+ to BBB-	Baa1 to Baa3	BBB+ to BBB-
4	BB+ to BB-	Ba1 to Ba3	BB+ to BB-
5	B+ to B-	B1 to B3	B+ to B-
6	CCC+ and below	Caa1 and below	CCC+ and below

➤ Located on DFSA website under [Policy Statements](#)

Credit Risk – RWA Calculation Methodology

Prudential Category	RWA Calculation Methodology
Category 1	SA
Category 2	SA unless approved by the DFSA to adopt SSA
Category 3A	SSA unless approved by the DFSA to adopt SA
Categories 3B, 3C and 4	Not Applicable
Category 5	SA Only

Credit Risk – RWA Calculation Methodology

➤ **Standardised Methodology overview**

1. Classify the Exposures into asset classes as per PIB 4.10 (10 categories e.g. Central Government, Banks, Corporates etc.)
2. Determine Credit Quality Grade ('CQG') as required at PIB 4.12.2 to 4.12.26 using the ECAI mapping tables
3. Using the CQG determine the applicable Credit Risk Weight ('CRW')
4. **Calculate Credit Risk Capital Requirement ('CRCOM')**

Credit Risk – RWA Calculation Methodology

- Calculation of Credit Risk Capital Requirement

$$\text{CRCOM} = \text{Credit RWA} \times 10\%$$

**Credit Risk
Capital Requirement**

**Credit Risk
Weighted Asset**

**Capital
Charge**

- Every On and Off Balance Sheet item to be included
- Amount of each Credit RWA based on 'E'

Credit Risk – RWA Calculation Methodology

- Calculation of Credit Risk Capital Requirement

$$\text{CRCOM} = \text{Credit RWA} \times 10\%$$

$$\text{Credit RWA} = \text{Amount of Exposure} \times \text{Counterparty Risk Weight}$$

‘E’ **‘CRW’**

Exposure net of Credit Risk Mitigation Depends on Asset Class and Credit Rating

Credit Risk SA – Example

Standardised Approach

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5)

Step 1: Calculate Credit RWA

Credit Risk Weighted Asset	=	Amount of Exposure	x	Counterparty Risk Weight
Credit RWA	=	E	x	CRW
30,000	=	20,000	x	150% *

** Risk weight for claims on B+ corporates - Standardised Approach*

Credit Risk SA – Example

Standardised Approach

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5)

Step 2: Calculate CRCOM

Credit Risk Capital Requirement	=	Credit Risk Weighted Asset	x	Capital Charge
CRCOM	=	Credit RWA	x	10%
3,000	=	30,000	x	10%

Credit Risk – Simplified Standardised

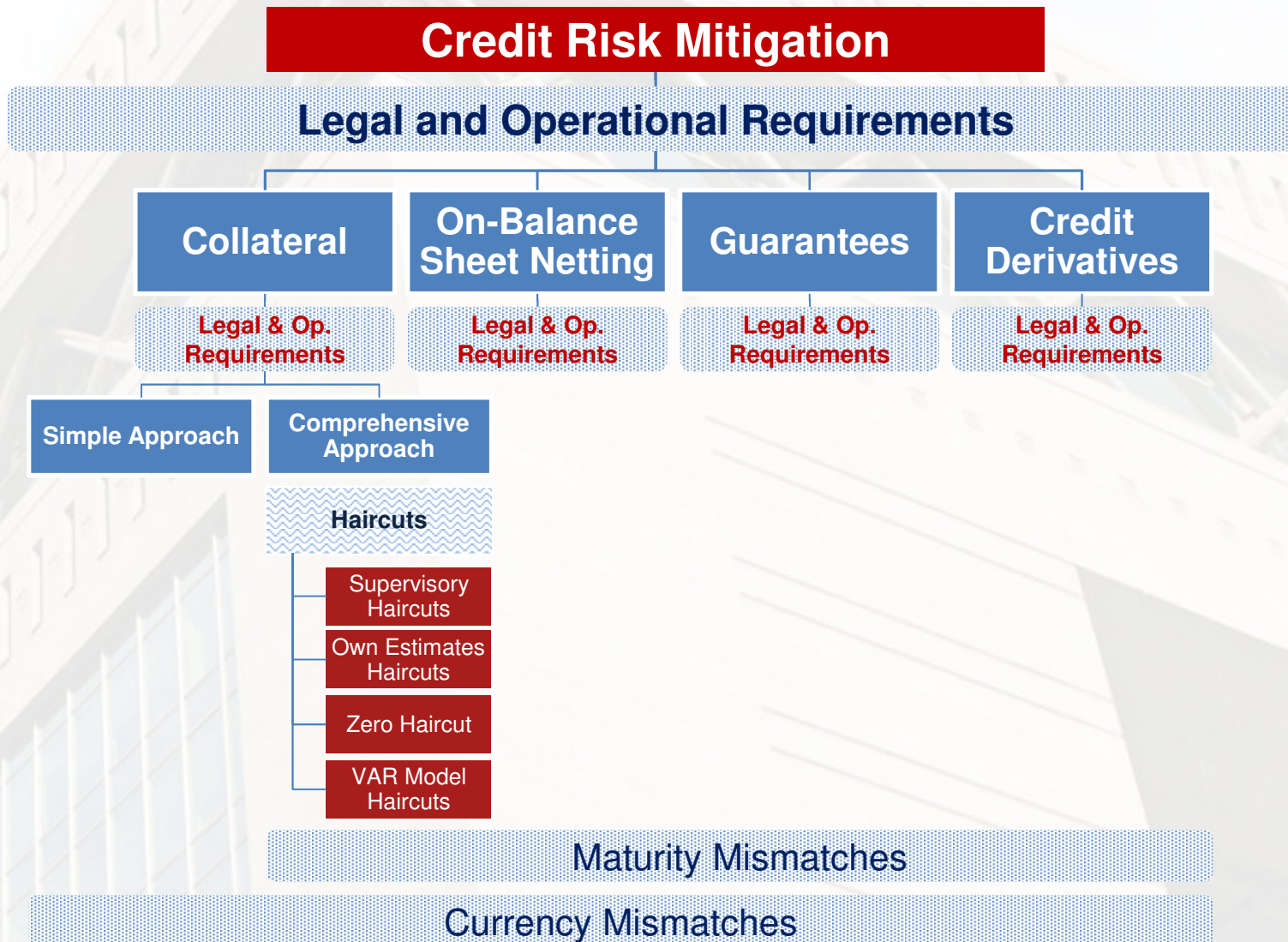
- SSA applicable to Category 2 and 3A Authorised Firms
- Same calculation approach as SA
- CRW for Banks and Sovereigns are based on Export Credit Agencies supported by OECD ratings
- All corporates carry 100% weighting. No risk adjustment.
- Limitations on use of Credit Risk Mitigation ('CRM')

Credit Risk Mitigation

- Credit Risk Mitigation is a technique used to reduce Credit Risk exposures and receive a regulatory capital relief
- CRM is a risk-sensitive approach for the calculation of Credit Risk Capital requirements
- Same categories of Credit Risk mitigants as in the previous regime; however, the range and the treatment of these instruments differ for the purpose of calculating Credit Risk Capital charge
- Using CRM may increase Residual Risks (Legal, Operational, Liquidity and Market Risks)

» » » **Legal and Operational Requirements**

Credit Risk Mitigation



Credit Risk Mitigation

Legal and Operational Requirements

➤ Legal Requirements

- Documentation must be binding on all parties and legally enforceable in all relevant jurisdictions
- Firms to conduct sufficient legal review to verify this

➤ Risk Management Requirements

- Employ robust procedures and processes to control Residual Risks

If Residual Risks are not adequately controlled, DFSA may impose additional capital charges or take appropriate supervisory actions.

Credit Risk Mitigation

Collateral

Eligible collaterals include only financial collaterals - instruments that can be quickly disposed of and converted into cash

Simple Approach

SA & SSA - substitutes the risk weight of the collateral for the risk weight of the counterparty for the collateralised portion of the exposure - subject to a CRW floor of 20%

Comprehensive Approach

SA only - full offset of eligible collateral against exposures by reducing the “volatility adjusted” amount of the exposure by the “volatility adjusted” value of the collateral

Values of the exposure and the collateral are adjusted by applying haircuts - exposure is adjusted to represent possible exposure growth, collateral is adjusted to represent collateral value loss due to market fluctuations

Supervisory
Haircuts

Own Estimates
Haircuts

VAR Model
Haircuts

Zero Haircut

DFSA Approval

Credit Risk Mitigation – Examples

Collateralised Transactions: *Simple Approach*

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5) against a debt security issued by Bank B (Rating AA- = CQG 1) with a market value of EUR 8M and a residual maturity of 5 years. The EUR/USD exchange rate = 1.4

Step 1: *Calculate the value of the credit protection adjusted for currency mismatch*

$$C_a = [C \times (1 - H_{fx})]$$

$$C = \text{EUR } 8,000 \times 1.4 = \text{USD } 11,200$$

$$H_{fx} = 8\%$$

(Haircut for currency mismatch between the exposure and the collateral)

$$C_a = [11,200 \times (1 - 0.08)] = 11,200 \times 0.92 = 10,304$$

Credit Risk Mitigation – Examples

Collateralised Transactions: *Simple Approach*

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5) against a debt security issued by Bank B (Rating AA- = CQG 1) with a market value of EUR 8M and a residual maturity of 5 years. The EUR/USD exchange rate = 1.4

Step 2: Calculate CRCOM for the unsecured portion

Counterparty Risk Capital Component	=	Amount of Exposure	x	Counterparty Risk Weight	x	Capital Charge
CRCOM 1	=	E	x	CRW	x	10%
1,454	=	(20,000 – 10,304)	x	150% *	x	10%

** Risk weight for claims on B+ corporates - Standardised Approach*

Credit Risk Mitigation – Examples

Collateralised Transactions: *Simple Approach*

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5) against a debt security issued by Bank B (Rating AA- = CQG 1) with a market value of EUR 8M and a residual maturity of 5 years. The EUR/USD exchange rate = 1.4

Step 3: *Calculate CRCOM for the collateralised portion*

Counterparty Risk Capital Component	=	Amount of Exposure	x	Counterparty Risk Weight	x	Capital Charge
CRCOM 2	=	E	x	CRW	x	10%
206	=	10,304	x	20% *	x	10%

** Risk weight for claims on AA- banks - Standardised Approach*

Credit Risk Mitigation – Examples

Collateralised Transactions: *Simple Approach*

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5) against a debt security issued by Bank B (Rating AA- = CQG 1) with a market value of EUR 8M and a residual maturity of 5 years. The EUR/USD exchange rate = 1.4

Step 4: *Calculate Total CRCOM*

CRCOM	=	CRCOM 1	+	CRCOM 2
1,660	=	1,454	+	206

Credit Risk Mitigation – Examples

Collateralised Transactions: *Comprehensive Approach*

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5) against a debt security issued by Bank B (Rating AA- = CQG 1) with a market value of EUR 8M and a residual maturity of 5 years. The EUR/USD exchange rate = 1.4

Step 1: *Calculate the exposure value after risk mitigation*

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

$$E = \text{USD } 20,000$$

$$H_e = 0\% \text{ (Haircut applicable for a cash exposure)}$$

$$C = \text{EUR } 8,000 \times 1.4 = \text{USD } 11,200$$

$$H_c = 4\% \text{ (Haircut applicable for a debt security issued by AA-/1 bank, residual maturity of 5 years)}$$

$$H_{fx} = 8\% \text{ (Haircut for currency mismatch)}$$

Credit Risk Mitigation – Examples

Collateralised Transactions: *Comprehensive Approach*

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5) against a debt security issued by Bank B (Rating AA- = CQG 1) with a market value of EUR 8M and a residual maturity of 5 years. The EUR/USD exchange rate = 1.4

Step 1: *Calculate the exposure value after risk mitigation*

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

$$E^* = \max \{ 0; [20,000 \times (1 + 0\%) - 11,200 \times (1 - 4\% - 8\%)] \}$$

$$E^* = \max \{ 0; [20,000 - (11,200 \times 0.88)] \}$$

$$E^* = \max \{ 0; 10,144 \} = 10,144$$

Credit Risk Mitigation – Examples

Collateralised Transactions: *Comprehensive Approach*

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5) against a debt security issued by Bank B (Rating AA- = CQG 1) with a market value of EUR 8M and a residual maturity of 5 years. The EUR/USD exchange rate = 1.4

Step 2: *Calculate CRCOM*

Counterparty Risk Capital Component	=	Amount of Exposure	x	Counterparty Risk Weight	x	Capital Charge
CRCOM	=	E *	x	CRW	x	10%
1,522	=	10,144	x	150% *	x	10%

** Risk weight for claims on B+ corporates - Standardised Approach*

Credit Risk Mitigation

Collateral

Eligible collaterals include only financial collaterals - instruments that can be quickly disposed of and converted into cash

Simple Approach

SA & SSA - substitutes the risk weight of the collateral for the risk weight of the counterparty for the collateralised portion of the exposure - subject to a CRW floor of 20%

Comprehensive Approach

SA only - full offset of eligible collateral against exposures by reducing the exposure amount by the value ascribed to the collateral

On-Balance Sheet Netting

a debit exposure is offset by a credit exposure (deposits) to the same counterparty. Regulatory capital is calculated over the net exposure.

Guarantees

- Substitution principal - counterparty risk weight for the unsecured portion and guarantor risk weight for the guaranteed portion
- Only Guarantees and Credit Derivatives provided by certain institutions are recognised as eligible

Credit Derivatives

- Only Credit Default Swaps and Total Return Swaps are recognised

Concentration Risk

- No major changes to policy
- Metrics of 10%, 25% and 800% continue to apply
- Introducing additional systems and controls requirements
- Amendment and redefining of exclusions and reliefs
- Specific introduction of Institutional Exemption
- Specific provisions for Parental Guarantees

Concentration Risk – Institutional Exemption

- Aim is to permit exposures to other Financial Institutions in specific circumstances
- Limit of the lower of US\$100 million or 100% of the Firms' capital
- Counterparties must have Credit Quality Grades of 1 – 3 i.e. Investment Grade
- Counterparties risk profile must be subject to Credit Risk reviews at least annually

Concentration Risk – Parental Guarantees

- Enables Firms to exclude an Exposure from the 25% Concentration Risk limit where it is guaranteed by the Firms' Parent or other regulated entity of its Group
 - Conditions:
 - Guarantees must meet CRM requirements
 - Guarantees provided must be less than 10% of the Parents capital resources
 - Parents' Credit Quality Grade of 1 or 2
 - Parent's regulatory confirmations
 - Overall Large Exposure limit of 800% applies

Firm to notify the DFSA if Parental Guarantees at 200%, 400% and 600% of Capital Resources

Concentration Risk – Example

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5) against a debt security issued by Bank B (Rating AA- = CQG 1) with a market value of EUR 12M and a residual maturity of 5 years. The EUR/USD exchange rate = 1.4. Bank A has Capital Resources of 50M.

$$E = \text{USD } 20,000 = 20,000 / 50,000 = 40\% > 25\% \text{ Capital Resources}$$

Calculate the exposure value after risk mitigation

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

$$H_e = 0\% \text{ (Haircut applicable for a cash exposure)}$$

$$C = \text{EUR } 12,000 \times 1.4 = \text{USD } 16,800$$

$$H_c = 4\% \text{ (Haircut applicable for a debt security issued by AA-/1 bank, residual maturity of 5 years)}$$

$$H_{fx} = 8\% \text{ (Haircut for currency mismatch)}$$

Concentration Risk – Example

Bank A grants a 5 years loan of USD 20M to Corporate C (Rating B+ = CQG 5) against a debt security issued by Bank B (Rating AA- = CQG 1) with a market value of EUR 12M and a residual maturity of 5 years. The EUR/USD exchange rate = 1.4. Bank A has Capital Resources of 50M.

$$E = \text{USD } 20,000 = 20,000 / 50,000 = 40\% > 25\% \text{ Capital Resources}$$

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

$$E^* = \max \{ 0; [20,000 \times (1 + 0\%) - 16,800 \times (1 - 4\% - 8\%)] \}$$

$$E^* = \max \{ 0; [20,000 - (16,800 \times 0.88)] \}$$

$$E^* = \max \{ 0; [20,000 - 14,784] \} = \max \{ 0; 5,216 \} = 5,216 > 25\% \text{ Capital Resources}$$

$$E^* = \max \{ 0; [20,000 - 12,500] \} = \max \{ 0; 7,500 \} = 7,500$$

Counterparty Credit Risk

- Continues with the existing **Current Exposure Method ('CEM')**
- Adopts the Basel provision on treatment of Counterparty Credit Risk ('CCR') exposure to a central counterparty
- Provisions of additional capital charge on account of Credit Value Adjustments ('CVA') not introduced
- Rules continue to allow firms to reduce the value of the CCR exposure through specific provisioning, credit derivatives, use of collateral and netting
- Methodology for recognition of eligible collateral and the conditions for netting follows the approaches specified under the Credit Risk Mitigation provisions

Operational Risk

Operational Risk

The risk of loss resulting from inadequate or failed

- **internal processes**
- **people**
- **systems**
- **external events**

Operational Risk definition also covers legal risk

Operational Risk

Risk Management Systems and Controls

All Prudential Categories

Capital Requirements

Prudential Categories 1, 2, 3A and 5

Professional Indemnity Insurance ('PII')

Prudential Categories 3B, 3C and 4

Operational Risk

Risk Management Systems and Controls

Governance Arrangements

Senior Management Responsibilities

Risk Identification and Assessment

- Approval process for new
 - Product
 - Activity
 - Process
 - System
- Op Risk Events tracking

Monitoring and Reporting

- Management Information System
- Notification of material Op Risk event to DFSA

Control and Mitigation

- Internal Controls
- Risk Transfer Strategies

IT Systems

**Information
Security**

**Business
Continuity**

Outsourcing

**Trading
Processes**

Risk Management Systems and Controls

➤ Risk Management Framework and Governance

- Establish and maintain Operational Risk Policy
- Governing Body to approve the Operational Risk Policy
- Guidance on Governing Body and Senior Management responsibilities

Risk Management Systems and Controls

- **Key aspects to be considered in the Operational Risk Policy**
 - Governance structure
 - Risk assessment tools
 - Operational Risk appetite
 - Approach to establishing and monitoring thresholds or tolerances
 - Risk reporting and Management Information Systems ('MIS')
 - Independent review of the Operational Risk framework

Risk Management Systems and Controls

- **Additional guidance and enhancements in the areas of**
 - IT Systems
 - Information Security
 - Outsourcing
 - Business Continuity and Disaster Recovery
 - Management of Operational Risks in trading rooms

Operational Risk

Risk Management Systems and Controls

- Complements existing overarching systems and controls and governance requirements in GEN Module
- Provides for implementation in a proportionate manner
- Requires firms to systematically track Operational Risk events
- Operational Risk event types to be consistent with the Basel framework
- Approval process for new products, activities, processes and systems

Operational Risk

Risk Management Systems and Controls

All Prudential Categories

Capital Requirements

Prudential Categories 1, 2, 3A and 5

Professional Indemnity Insurance ('PII')

Prudential Categories 3B, 3C and 4

Operational Risk

Capital Requirements

**Basic Indicator
Approach
(‘BIA’)**

Default
Methodology

**Standardised
Approach
(‘SA’)**

Alternative
Methodology

**Alternative
Standardised
Approach
(‘ASA’)**

Alternative
Methodology

Subject to DFSA prior approval

Operational Risk

Basic Indicator Approach

Operational Risk Capital Requirement

=

Gross Annual
Income
Year 1

(where positive)

+

Gross Annual
Income
Year 2

(where positive)

+

Gross Annual
Income
Year 3

(where positive)

3

x 15%

Operational Risk

Standardised Approach

Operational Risk Capital Requirement

$$\frac{\begin{array}{c} \text{Gross Annual} \\ \text{Income} \\ \text{Year 1} \\ \text{(where positive)} \end{array} + \begin{array}{c} \text{Gross Annual} \\ \text{Income} \\ \text{Year 2} \\ \text{(where positive)} \end{array} + \begin{array}{c} \text{Gross Annual} \\ \text{Income} \\ \text{Year 3} \\ \text{(where positive)} \end{array}}{3} = \text{Beta Factor}$$

Corporate Finance	Trading & Sales	Retail Banking	Commercial Banking	Payment & Settlement	Agency Services	Asset Management	Retail Brokerage
18%	18%	12%	15%	18%	15%	12%	12%

Operational Risk

Risk Management Systems and Controls

All Prudential Categories

Capital Requirements

Prudential Categories 1, 2, 3A and 5

Professional Indemnity Insurance ('PII')

Prudential Categories 3B, 3C and 4

Professional Indemnity Insurance ('PII')

- Extends requirement to hold PII cover to a wider set of financial services activity (before it was applicable only to Trust Service Providers).
- PII applicable to the following financial services:
 - Arranging Credit or Deals in Investments
 - Managing Assets
 - Advising on Financial Products or Credit
 - Managing a Collective Investment Fund
 - Providing Custody
 - Insurance Intermediation
 - Insurance Management
 - Managing a Profit Sharing Investment Account
 - Providing Trust Services
 - Providing Fund Administration
 - Acting as the Trustee of a Fund

Operational Risk

Professional Indemnity Insurance ('PII')

- Appropriate to the nature, size, complexity and risk profile of the Firm's business
- Issued by a reputable and well-capitalised insurer
- Include cover in respect of conduct of employees and legal costs

Professional Indemnity Insurance ('PII')

An Authorised Firm must:

- Provide the DFSA a copy of the PII policy
- Notify the DFSA of any material changes to the cover
- Notify the DFSA of any significant PII claim made

An Authorised Firm can fulfill the requirements by ensuring coverage of activities under a Group-wide PII policy

Market Risk

Market Risk

- Improved systems and controls including for Trading Book ('TB')
- Enhanced definition of Trading Intent and TB Policy
- No material changes to the methodologies for determination of Market Risk Capital requirement
- Introduced capital requirement for Collective Investment Fund Risk
- Enhanced guidance on
 - Prudent valuation
 - Internal models for market risk
 - Stress Testing and Incremental Risk Charge ('IRC') models

Interest Rate Risk in the Non-Trading Book

Interest Rate Risk

- Applies to Category 1 and 2 Authorised Firms
- Systems and controls requirements including policy, strategy and governance framework
- Requirement for frequent evaluation of exposures to Interest Rate Risk ('IRR') in Non-Trading Book ("NTB")
- IRR-NTB to be covered under the Supervisory Review and Evaluation Process – IRAP and ICAAP

Interest Rate Risk

- No explicit capital charge requirements, however, the DFSA may impose ICR
- Quarterly assessment of the effect of an unexpected interest rate shock of 200 Bp
- If Economic Value decline by more than 20% of Capital Resources » » » **immediate notification to the DFSA**

Liquidity Risk

Liquidity Risk

- No major changes to policy
- Enhanced systems and controls requirements
- Liquidity limits for Category 1 and 5 Firms of 15% and 25% continue to apply
- Implement new liquidity measures in observation phase, consistent with Basel III timelines
 - Coverage only for banks and principal dealers
- Collect and monitor information required to implement the measures – periodic reports
- Appropriate calibration of parameters – wherever national discretions are available

Group Risk

Group Risk – Changes

- Enhanced definitions of Financial Group, Financial Group Capital Requirement and Financial Group Capital Resources
- Financial Group Capital Requirement calculated using the accounting consolidation method as per IFRS*
- Domestic Bank in the DIFC must always have a regulated bank or bank holding company as its Parent
- A Domestic Firm in Categories 3A, 3B, 3C & 4 (which is not a Subsidiary) cannot start a Bank or an Insurer

* IFRS: International Financial Reporting Standards

Public Disclosure Requirements

Disclosure Requirements

- Introduces enhanced disclosure requirements in line with Pillar 3 of Basel Framework
- Aimed at ensuring adequate disclosures to market participants
- Applicable to Authorised Firms in Prudential Category 1, 2 or 5.

Disclosure Requirements

- Member of a Financial Group to ensure that the disclosures are made at Financial Group level
- Exemption from the disclosure requirements for a subsidiary of
 - (a) a Regulated Financial Institution, or
 - (b) another Authorised Firm is in Category 1, 2 or 5which is already subject to equivalent Public Disclosure Requirements

Disclosure Requirements

- Include **Quantitative** and **Qualitative** disclosures about the firm's
 - Capital Resources
 - Capital Adequacy
 - Credit Risk
 - Credit Risk Mitigation
 - Exposures to Counterparty Credit Risk
 - Securitisation Exposures
 - Market Risk
 - Operational Risk
 - Interest Rate Risk in the Non-Trading Book

Disclosure Requirements

- Requirement to implement and maintain a written disclosure policy
- Appropriate verification to ensure accuracy and timeliness of disclosures
- Avoid duplication if disclosure is similar to a disclosure required under the IFRS

Disclosure Requirements

Frequency, Location and Process

- Disclosures of CET1 Capital, T1 Capital and T2 Capital and deductions from Capital Resources required quarterly
- Other disclosures to be made at least once a year
- Reporting deadlines are in accordance with quarterly and annual reporting obligations
- Disclosures to be made (subject to certain exceptions) either in the firm's annual report or periodic financial statements

Disclosure Requirements

Omissions

- Authorised Firms may omit certain disclosures based on:
 - Materiality
 - Proprietary nature
 - Confidentiality
- For any quantitative disclosure omitted, to disclose general qualitative information about the subject matter along with reasons for omission

Supervisory Review and Evaluation Processes

Supervisory Review and Evaluation Processes

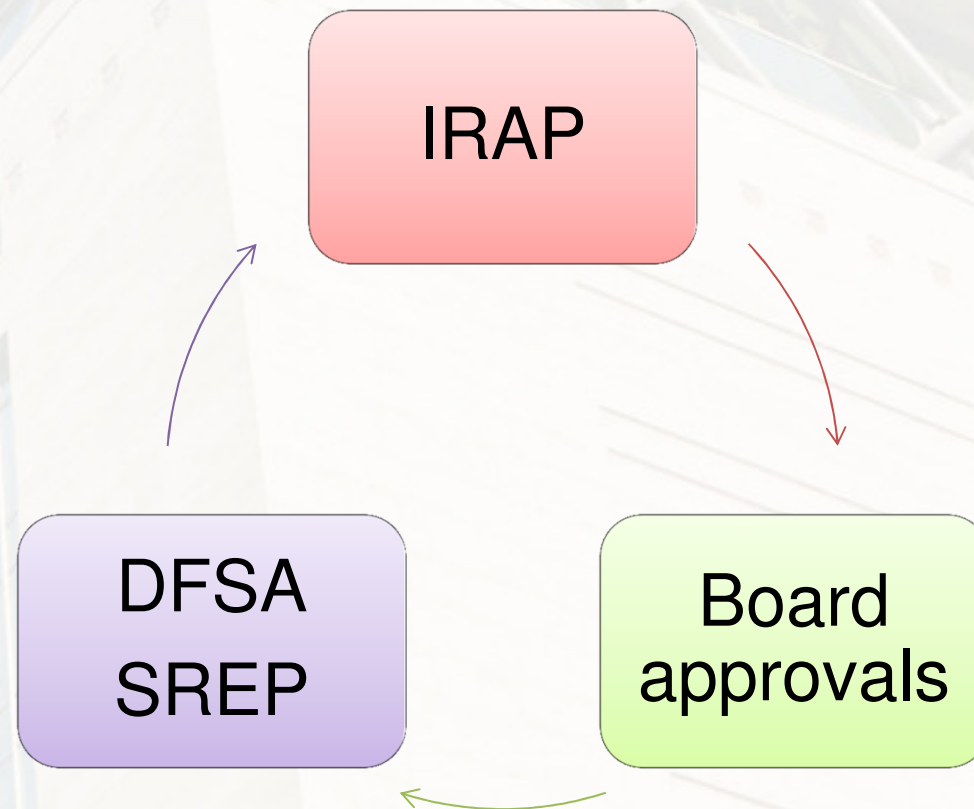
- Aim is to promote internal risk assessments by Authorised Firms to assess risks faced from their activities
- Internal Risk Assessment Process ('IRAP') applies to all Authorised Firms **other than Category 4 Firms**
- Internal Capital Adequacy Assessment Process ('ICAAP') applies **only to Category 1, 2, 3A and 5 Firms**
- DFSA Supervisory Review and Assessment Programme
- Effective Financial Year ending 2013

Supervisory Review and Evaluation Processes

- Supervisory Review and Evaluation Process ('SREP')
- Completed by the DFSA on receipt of IRAP and ICAAP
- Aim to enable assessment of risk profile of firms
- Purpose is to assess the quality of IRAP or ICAAP
- ICAAP may result in DFSA placing an Individual Capital Requirement on the Firm
- Case by case assessment

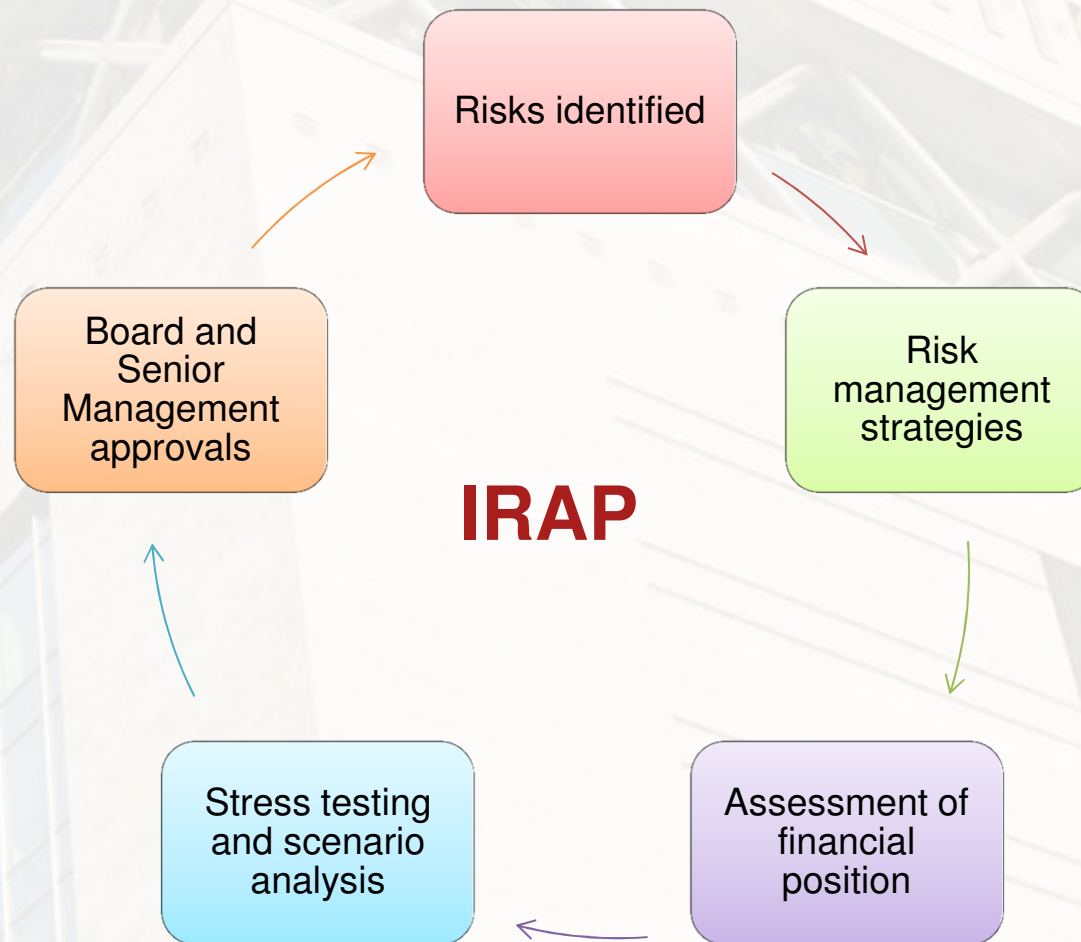
Internal Risk Assessment Process

IRAP is applicable to all Firms other than Category 4. It is a comprehensive internal risk assessment



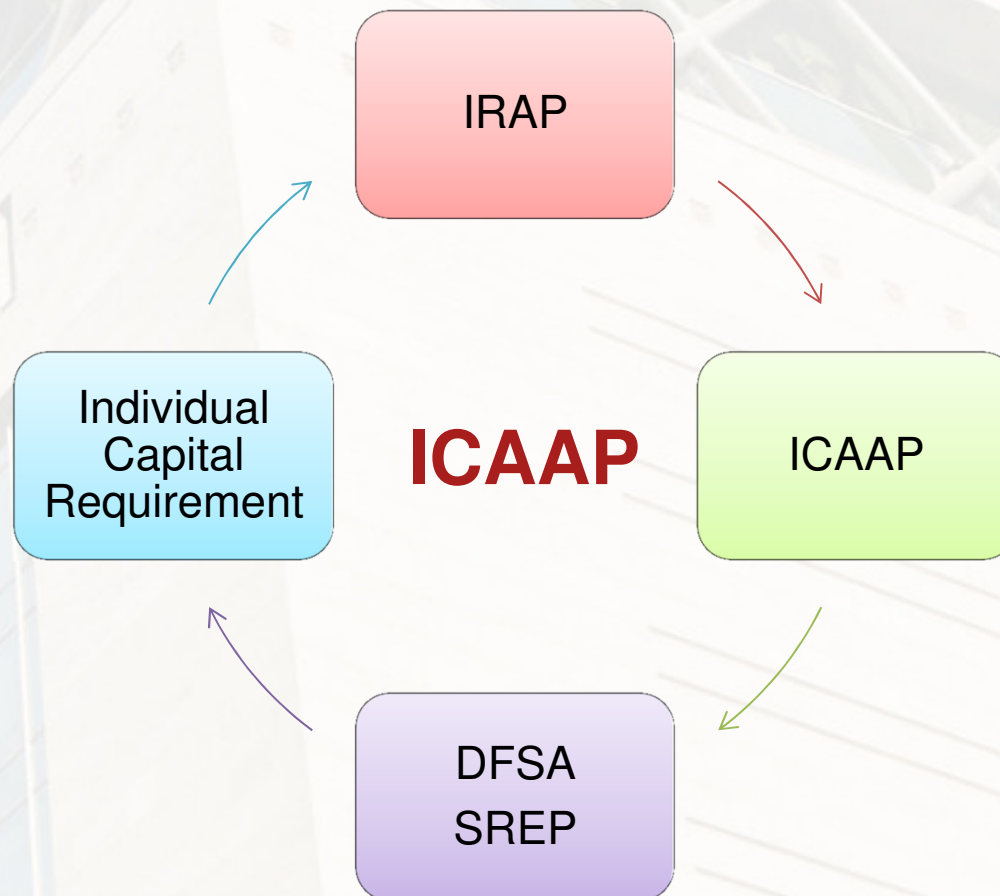
Internal Risk Assessment Process

IRAP Methodology



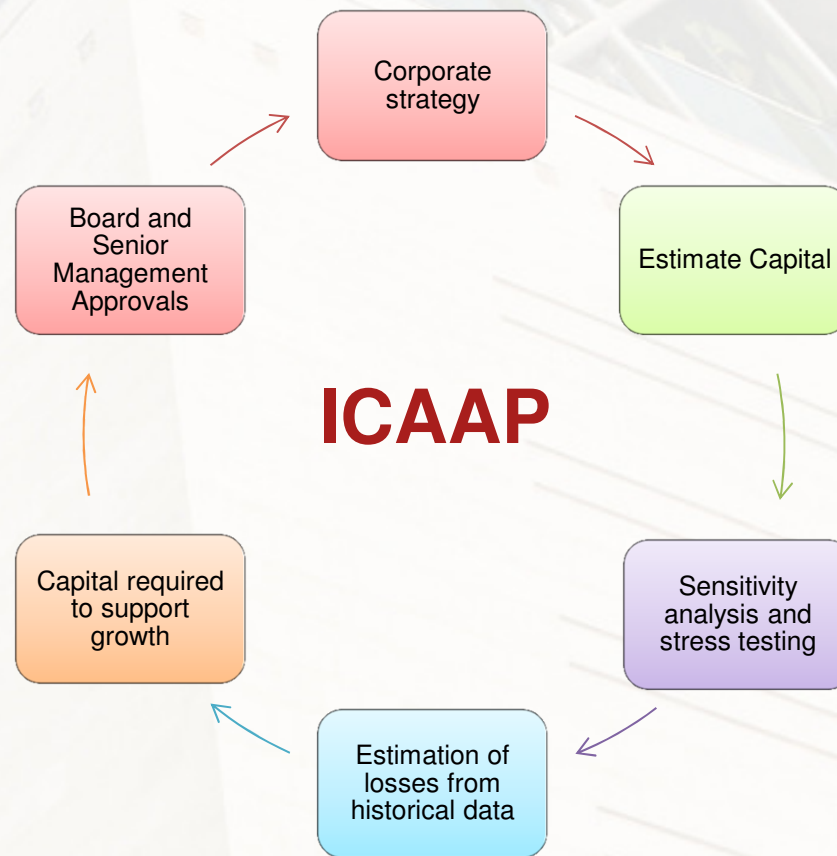
Internal Capital Adequacy Assessment Process

ICAAP is an assessment used to determine appropriate capital required as determined by the IRAP



Internal Capital Adequacy Assessment Process

ICAAP is an assessment used to determine appropriate capital required as determined by the IRAP



Questions?

If you have specific questions, please contact your Relationship Manager.

For general queries about the DFSA PIB Module, you can contact any of the following:

Prasanna Seshachellam, Director - Supervision
pseshachellam@dfsa.ae

Alan Burke, Associate Director - Supervision
aburke@dfsa.ae

Nagendra Shivaraya, Senior Manager - Supervision
snagendra@dfsa.ae

Mohamad El Khalil, Senior Manager - Supervision
melkhalil@dfsa.ae



Thank You