BERMUDA MONETARY AUTHORITY

GUIDANCE NOTES

BASEL III FOR BERMUDA BANKS AND DEPOSIT COMPANIES

Amended February 2024

Note: This document should be read in conjunction with 'The Basel Framework'.

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I. ABBREVIATIONS

The following abbreviations have been used in this document:

ADC	Acquisition, Development and Construction
AT1	Additional Tier 1 Capital
BCBS	Basel Committee on Banking Supervision
BI	Business Indicator
BIC	Business Indicator Component
BM$	Bermuda Dollar
BMA	Bermuda Monetary Authority
CAR	Capital Adequacy Ratio
CARP	Capital Assessment and Risk Profile
CCoB	Capital Conservation Buffer
CCyB	Counter Cyclical Buffer
CCF	Credit Conversion Factor
CCR	Counterparty Credit Risk
CET1	Common Equity Tier 1 Capital
CP	Consultation Paper
CRM	Credit Risk Mitigation
CSME	Corporate Small and Medium Enterprise
CVA	Credit Valuation Adjustment
D-SIB	Domestic-Systemically Important Bank
DP	Discussion Paper
DTA	Deferred Tax Asset
ECA	Export Credit Agency

ECAI	External Credit Assessment Institutions
ECL	Expected Credit Losses
ECRA	External Credit Risk Assessment
ERBA	External Ratings-Based Approach
EVE	Economic Value of Equity
FASB	Financial Accounting Standards Board
FC	Financial Component
GAAP	Generally Accepted Accounting Principles
GCRE	General Commercial Real Estate Exposures
GRRE	General Residential Real Estate Exposures
HQLA	High Quality Liquid Assets
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards
ILDC	Interest, Leases and Dividend Component
ILM	Internal Loss Multiplier
IMS	Internal Measurement Systems
IOSCO	International Organisation of Securities Commissions
IPCRE	Income Producing Commercial Real Estate
IPRRE	Income Producing Residential Real Estate
IRRBB	Interest Rate Risk in the Banking Book
LCR	Liquidity Coverage Ratio
LC	Loss Component
LTV	Loan to Value Ratio
MDB	Multilateral Development Bank

NII	Net Interest Income
NSFR	Net Stable Funding Ratio
OBS	Off-Balance Sheet
OCI	Other Comprehensive Income
OECD	Organisation for Economic Co-operation and Development
ORC	Operational Risk Capital
PIR	Prudential Information Return
PSE	Public Sector Entities
QIS	Quantitative Impact Study
RSA	Revised Standardised Approach
RWA	Risk-Weighted Assets
SC	Services Component
SCRA	Standardised Credit Risk Assessment
SME	Small and Medium Enterprise
SPV	Special Purpose Vehicle
SREP	Supervisory Review and Evaluation Process
STC	Simple, Transparent and Comparable
TDSR	Total Debt Service Ratio
TLAC	Total Loss-Absorbing Capacity

II. PREAMBLE

1. The financial crisis of 2007-2008 was a crisis of both liquidity and capital. Many banks engaged in funding regimes that were excessively weighted in short-term and volatile wholesale liabilities that were invested in illiquid assets. This became a prime causal factor in the crisis and an enduring and valuable lesson that has been carried forward into the creation of Basel III. The crisis also raised significant concerns over the quantity and quality (loss absorbency as a going concern) of bank capital. Accordingly, Basel III addresses the challenges of improving the quantity and quality of bank capital (including by emphasising the going concern importance of common equity) while also addressing the need for a potent liquidity buffer to counteract periods of financial market stress.

2. To introduce Basel III to the Bermuda banking sector, the Bermuda Monetary Authority (Authority or BMA) produced a Discussion Paper (DP) in 2011 and a Consultation Paper (CP) in 2013. An extensive formal public consultation process followed to ensure familiarity with and acceptance of the Basel III measures, as adapted for the Bermuda market. The measures focus on three main areas:

   i) Quantity, quality, consistency and transparency of capital;
   ii) Imposition of a prudent leverage ratio and capital buffers; and
   iii) Adoption of prudential liquidity standards centred on a bank's ability to fund itself during a short-term stress period.

3. In the DP and CP, the Authority provided an overview of the Basel III standards and sought the views of Bermuda's banks and other stakeholders on their implementation in Bermuda. The consultation process that followed the CP included a series of meetings with the banking sector, represented by their Chief Financial Officers. Discussions covered the feedback received on the CP as well as issues relating to a planned leverage ratio, the appropriate level of various capital buffers, the interaction of these new requirements with existing Pillar 2 guidance and the specification of the Liquidity Coverage Ratio (LCR) framework to include the allowance of bank-specific and empirically supported deposit behaviour assumptions. An additional round of LCR Quantitative Impact Study (QIS) was also conducted and concluded on 30 June 2014 to ensure that the banking sector would be able to adopt an LCR reporting template and start meeting the phased-in requirements commencing in 2015.

4. The Authority consistently communicated its view that the adoption of these new standards, with minimal deviation from the core Basel framework, is important to protect the interests of a diverse base of depositors, preserve the stability of the Bermuda financial system and enhance the reputation of the Bermuda banking market and its participants. The Authority was pleased to note that submissions in response to the DP and CP and the subsequent implementation meetings largely supported this position.

5. The Authority assessed respondents' feedback on the implementation of specific elements of Basel III in Bermuda and incorporated those views in the capital and liquidity standards put forward in the final rules published in November 2017. The Authority further analysed the detailed credit information gleaned from its enhanced monitoring efforts to assess the impact of a prolonged period of economic stagnation on the credit quality and capital adequacy of the sector.

The Authority believes that the capital buffers contained in the Basel III framework provide the capital base needed to successfully manage through the credit cycle.

6. The final rules published in November 2017 appropriately balance prudent risk taken by banks while simultaneously preserving prudent capital buffers and liquidity resilience to protect depositors and preserve the stability of the banking sector within Bermuda.

7. Concerns addressed in this guidance include:
   i) Level playing field
   The Authority is confident that this guidance adopts a framework which adheres to the fundamental components of the Basel approach, such as the definitions of capital, conservation buffers and leverage ratio, balanced against limited jurisdictional adjustments consistently applied to all banks. However, not all banks will be subject to exactly the same capital requirements. Capital requirements will need to reflect each bank's unique risk profile through the Capital Assessment and Risk Profile (CARP) Pillar 2 process and the setting of capital surcharges. The Authority is confident that its regime is consistent with international standards and will accomplish the primary goal of strengthening the resilience of the Bermuda banking sector while enabling it to continue to be globally competitive.

   ii) Timetable for implementation
   The multi-year implementation timetable was built into the core Basel III framework and a significant consultation period included several rounds of QIS and an extensive series of sector outreach meetings to work through identified concerns and facilitate implementation. Given this, the Authority provided sufficient time for institutions to prepare for the adoption of the new rule in 2017, also considering time needed for system adjustments to comply with the new reporting requirements. Annex 1 of this paper sets out the Bermuda implementation timetable.

   The 2017 rules became effective on 1 January 2015, with all provisions coming into effect at that time unless stated otherwise in the body of this document, including Annex 1. All banks reported in a Basel III consistent manner commencing with the Prudential Information Return (PIR) for the first quarter of 2015.

2024 Guidance Update

8. In December 2017, the BCBS issued a document entitled *Basel III: Finalising post-crisis reforms* (Basel III reforms), complementing the initial phase of the Basel reforms previously issued and setting out the finalisation of the Basel III framework.

9. The objective of the Basel III reforms is to reduce any excessive variability of Risk-Weighted Assets (RWA), which was identified as an issue in the 2008 global financial crisis. Prudent and credible calculation of a bank's RWA is an integral element of a risk-weighted capital framework.

10. In December 2021, the Authority issued the following consultation papers outlining the proposed adoption of the Basel III reforms:
    i) Amendments to the Standardised Approach for Calculating Pillar 1 Operational Risk Capital Charges;

ii) Revisions to the Large Exposure Frameworks for Banks; and
iii) Output Floor for Banks.

The consultation period for these specific Basel III reforms concluded at the end of March 2022, after which all feedback received from external stakeholders was reviewed with formal responses issued by the Authority. Based on this feedback, whilst also seeking to align the Authority's framework with international standards, the Authority adopted the aforementioned Basel III reforms. However, to ensure they remain appropriate for a jurisdictional context, the Authority has included various national discretions in relation to the amended operational risk capital framework.

The revised operational risk and large exposures frameworks and the new output floor framework came into effect on 1 January 2023, with a 12-month transition period ending 31 December 2023.

11. The Authority also consulted on the following two standards:
    i) Revised operational risk principles; and
    ii) Revisions to the current Liquidity Coverage Ratio framework.

12. The revised operational risk principles establish the Authority's minimum expectations for a bank's operational risk management framework and are based on the BCBS' March 2021 *Principles for the Sound Management of Operational Risk*[1]. The revised operational risk principles came into effect on 1 January 2023.

13. The revisions to the Liquidity Coverage Ratio (LCR) framework relate to the outflow rates applied to specific financial counterparties, namely trust, fund management and inward insurance customers. As part of the Authority's periodic reviews of issued liquidity standards and discussions with local banking institutions, it was noted that the actual behaviour of deposits from these specific financial counterparties was not reflective of the 100% outflow rate being applied. After consultation, the Authority reinstated a previous national discretion that provides for more outflow rates. Institutions will be able to apply for these rates through a submission of annual behavioural analyses to the Authority. This LCR national discretion became effective on 1 April 2022.

14. In May 2022, the Authority issued its final consultation paper related to the Basel III reforms, which specifically outlined proposed revisions to the current standardised approach for calculating credit risk Pillar 1 capital charges. This consultation period ended in August 2022 with the Authority reviewing and formally responding to all comments received. Based on this feedback, while also seeking to align the Authority's framework with international standards, the Authority has adopted the revised standardised approach for credit risk. However, to ensure the approach is appropriate for a jurisdictional context the Authority has included various national discretions primarily related to the risk-weighting of regulatory real estate exposures.

15. **The revised standardised approach for credit risk come into effect in January 2024, with a 12-month transition period ending 31 December 2024.**

[1] Basel's Principles for the Sound Management of Operational Risk

III. BACKGROUND

16. Bermuda banks and deposit companies are required to meet, on an ongoing basis, the minimum licensing criteria set out in the Second Schedule to the Banks and Deposit Companies Act 1999 (Act). This states, among other requirements, that institutions must conduct their business in a prudent manner, including that they maintain capital and financial resources, such as liquidity, commensurate with the nature and scope of their operations. The setting and monitoring of requirements for capital adequacy and liquidity, including the effective assessment and management of risk within institutions, represent key elements in the framework of prudential oversight and control applied by the Authority to help protect the interests of depositors. The approach developed and applied by the Authority in this regard has reflected applicable regulatory standards designed and promulgated by the BCBS, the international standard-setting body for banks. Since January 2009, banks licensed in Bermuda have been required to comply with the framework set out in the Authority's rules and guidance.

17. At the end of 2010, the BCBS agreed to the key elements of a more comprehensive set of standards that not only strengthened the capital adequacy and risk management provisions of the Basel II framework but also introduced international prudential liquidity standards.

18. The movement to Basel III adoption by Bermuda is consistent with past adoption of Basel I and Basel II and represents Bermuda's adherence to international standards aimed at the aforementioned strengthening of capital and liquidity in the banking sector.

19. In this guidance, the Authority adopts the capital and liquidity regulatory requirements consistent with Basel III for this jurisdiction, with implementation as set out in paragraph 15 above. These requirements should be viewed in the broader context of the Authority's efforts to maintain high standards of risk management and corporate governance within Bermuda's banks. While Pillar 1 of the Basel III standards focuses on quantitative regulatory capital and liquidity requirements, the Authority is of the view that observance of quantitative regulatory prudential minima is only one important element in a comprehensive framework.

20. Of equal importance is the adoption within an institution of a sound framework of governance and risk management under Pillar 2 and appropriate public disclosure under Pillar 3. Consistent with this view, the Authority will continue to promote strengthened internal risk management through the Capital Assessment and Risk Profile (CARP) process and its Pillar 2 authority to prescribe capital levels commensurate with a bank's assessed risk profile.

IV. CAPITAL FRAMEWORK

Definition of Capital

21. The Authority has adopted Common Equity Tier 1 Capital (CET1) as the primary and predominant form of regulatory capital. CET1 is intended to absorb losses on a 'going concern' basis. Additional Tier 1 capital (AT1) will also be allowed in the capital framework, subject to the inclusion criteria contained in The Basel Framework[2]. Tier 2 capital will provide an additional measure of regulatory capital on a 'gone concern' basis of impending insolvency and potential liquidation. A condition of AT1 or Tier 2 eligibility will be a clear and unequivocal provision (acceptable to the Authority) requiring the elimination of the capital instrument or its conversion to common equity at the point of non-viability of the bank as determined by the Authority. This loss absorbency feature is key to any component of capital being considered at any tier.

Minority Interests

22. Qualifying minority interests, comprising Tier 1 and Tier 2 qualifying capital issued by consolidated subsidiaries, can be included in regulatory capital if it meets the criteria set out in The Basel Framework[3].

Regulatory Adjustments and Deductions

23. The Authority has adopted The Basel Framework[4] criteria with respect to the regulatory adjustments and deductions in the calculation of regulatory capital. These adjustments will be applied in the calculation of CET1.

24. The Authority retains national discretion to allow banks to exclude temporarily from the deduction requirement certain investments where these have been made in the context of resolving or providing financial assistance to restructure a distressed institution.

25. The Authority adopted the one-time irrevocable election to exclude Other Comprehensive Income (OCI) from CET1. Each bank was required to make a definitive election no later than 31 March 2015.

26. The detailed provisions for all other regulatory adjustments and deductions from CET1, including but not limited to goodwill, all intangibles and certain deferred tax assets, can be found in The Basel Framework[5].

Minimum capital ratios

27. The Authority has adopted The Basel Framework regulatory minimum capital levels as follows:

    a. CET1 must be at least 4.5% of Risk-Weighted Assets (RWA) at all times;
    b. Tier 1 (T1) capital must be at least 6.0% of RWA at all times; and
    c. Total capital (T1 + T2 capital) must be at least 8.0% of RWA at all times.

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[2] Basel Framework: Definition of capital - Additional Tier 1 capital

[3] Basel Framework: Definition of capital - Minority interest (i.e., non-controlling interest) and other capital issued out of consolidated subsidiaries that is held by third parties

[4] Basel Framework: Definition of capital - Regulatory adjustments

[5] Basel Framework: Definition of capital - Regulatory adjustments

The regulatory limits above do not include Pillar 2 capital add-ons that may be applied by the Authority in connection with its Prudential Supervision.

Capital Conservation Buffer

28. The Authority has adopted the Capital Conservation Buffer (CCoB)[6], set at the full 2.5% of RWA, composed of CET1-eligible capital. The CCoB is designed to ensure that banks build up and retain capital buffers outside of periods of stress, which can be drawn down in exceptional circumstances if severe losses are incurred. Appropriate capital distribution constraints will be imposed on banks whose capital level falls below this buffer.

Counter-cyclical Buffer

29. The Authority has adopted The Basel Framework Counter-cyclical Buffer (CCyB)[7] , which is introduced when macro-economic indicators provide an assessment of excessive credit or other pressures building up in the banking sector. At this point, the Authority reserves the right to introduce a CCyB of up to 2.5% based on an assessed need for banks to build up their capital ahead of having to meet possible losses should these pressures materialise. The countercyclical buffer must comprise CET1-eligible capital.

Domestic Systemically Important Bank (D-SIB)

30. The Authority will assess the extent to which Bermuda banks (collectively and individually) pose a degree of material systemic risk to the economy of Bermuda due to their roles in deposit-taking, corporate lending, payment systems and other core economic functions[8]. This assessment will be based on a range of metrics relating to the size, interconnectedness, substitutability and complexity of each bank. The Authority will apply a capital surcharge buffer, specified as a stated percentage of RWA and composed of CET1-eligible capital, for Bermuda banks designated to be a D-SIB on the basis of the assessment. The size of this buffer will be a maximum of 3.0%, depending on the extent of systemic risk posed by such D-SIB. Each D-SIB will be advised of its specific buffer directly by the Authority.

Counterparty Credit Risk

31. The Authority has adopted the Counterparty Credit Risk (CCR) requirements of The Basel Framework, which include the addition of a Credit Valuation Adjustment (CVA) to the capital charge to address potential mark-to-market losses associated with the deteriorating credit-worthiness of any applicable counterparty.

Central Counterparties

32. The Authority has adopted the BCBS' rules relating to exposures to central counterparties[9].

[6] Basel Framework: Risk-based capital requirements – Capital conservation buffer
[7] Basel Framework: Risk-based capital requirements – Counter cyclical buffer
[8] Basel Framework: Scope and Definitions (SCO50)
[9] Basel Framework: Capital requirements for bank exposures to central counterparties (CRE54)

External Credit Assessment

33. The Authority retains the external credit assessment institution eligibility criteria in line with Basel III, which includes the incorporation of key elements of the International Organization of Securities Commissions' (IOSCO) Code of Conduct Fundamentals for Credit Rating Agencies in the criteria. Existing approved external credit assessment institutions will continue to be eligible.

Market Risk Framework

34. The Authority retains the exemption from reporting under the market risk framework where market risk remains de minimis. The Authority reserves the right to impose such reporting should it assess that a bank is exposed to material market risk.

Leverage Ratio

35. The Authority has adopted the requirement for a minimum 5.0% leverage ratio calculated as the ratio of Tier 1 Capital (including AT1) to Total Exposure as set out in The Basel Framework[10]. Total Exposure will include both on-balance sheet exposures (generally measured following the accounting measure of exposure) and off-balance sheet exposures and subject to the credit conversion factors used in the Standardised Approach for Credit Risk. In computing any of the on-balance sheet or off-balance sheet exposures, collateral netting is not allowed. This leverage ratio has been chosen because it reflects an appropriate capital backstop for a jurisdiction that does not have a central bank or a fully funded deposit insurance scheme, thus ensuring that a robust capital framework is in place to support financial stability.

[10] Basel Framework: Leverage Ratio

V. STANDARDISED APPROACH FOR CALCULATING PILLAR 1 OPERATIONAL RISK CAPITAL CHARGE

36. In December 2021, the Authority published a public consultation paper outlining the proposed adoption of a revised standardised approach (RSA) for calculating Pillar 1 operational risk capital under The Basel Framework. The three-month consultative period ended on 31 March 2022. The Authority received feedback from banks and other stakeholders. This feedback was considered in the development of the final guidance and formal feedback was provided to all respondents. The Authority has adopted the standardised approach for calculating operational risk capital requirements as set out in The Basel Framework[11]. The Authority has further adopted several national discretions as outlined in the following paragraphs. This new standard repeals and replaces the current Pillar 1 operational risk capital charge methodology as outlined in the Authority's 2008 Basel II framework, The Revised Framework for Regulatory Capital Assessment.

37. The standardised approach methodology is based on the following components:

    i) Business Indicator;
    ii) Business Indicator Component; and
    iii) Internal Loss Multiplier.

A. BUSINESS INDICATOR (BI)

38. The BI is viewed as being better positioned to capture a bank's exposure to operational risk inherent within various business units. It also includes items sensitive to operational risks that were not considered in the previous methodology.

39. The BI encompasses the three macro-components of a bank's income statement[12]:

    i) The interest, leases and dividend component (ILDC);
    ii) The services component (SC); and
    iii) The financial component (FC).

40. The formula for calculating a bank's BI, using the three aforementioned components, is as follows:

$$\mathbf{BI = ILDC + SC + FC}$$

41. The scope of losses and BI items used to calculate the operational risk capital requirements must include acquired businesses and merged entities over the period prior to the acquisition/merger that is relevant to the calculation of the standardised approach (ten years for losses and three years for BI).

42. A bank may request approval from the Authority to exclude divested activities from the calculation of the BI. Such exclusions must be disclosed in accordance with the Pillar 3 requirements.

[11] Basel Framework: Calculation of RWA for operational risk
[12] Basel Framework: Calculation of RWA for operational risk - Definition of operational risk

B. BUSINESS INDICATOR COMPONENT (BIC)

43. Once the BI is determined, the next step is to calculate the BIC, which is done by multiplying the BI by marginal coefficients that increase with the size of the BI. The table below highlights the marginal coefficients that the Authority has adopted and are more appropriate for jurisdictional context:

BI ranges and marginal coefficients		
Bucket	**BI range (in BM$m)**	**BI marginal coefficients**
1	≤100	12%
2	100 < BI ≤ 250	15%
3	>250	18%

44. The application of the marginal coefficients is on a tiered basis[13].

C. INTERNAL LOSS MULTIPLIER (ILM) AND LOSS COMPONENT (LC)

45. For a bank that falls only into bucket 1 of the BIC, internal loss data will not be included for operational risk capital calculation purposes. In other words, such a bank's ILM is equal to 1[14]. However, the Authority may allow the inclusion of internal loss data into the framework for a bank in bucket 1, subject to the bank meeting the loss data collection requirements. In this case, the bank is required to make a formal application to the Authority for the inclusion of loss data for operational risk capital calculation purposes.

46. When BI figures for a solo or subsidiary bank reach bucket 2, the bank is required to use loss experience in standardised approach calculations. A solo or subsidiary bank uses only losses it has incurred in the standardised approach calculations (and does not include losses incurred by other parts of the bank holding company).

47. If a subsidiary of a bank belonging to bucket 2 or higher does not meet the qualitative standards for the use of the LC, the subsidiary must calculate the standardised approach capital requirements by applying 100% of the BIC. In such cases, the Authority may require the bank to apply an ILM greater than 1.

48. The RSA for operational risk capital uses the ILM to incorporate the bank's internal operational risk loss experience, or LC into the determination of the operational risk capital (ORC) requirement.

49. The ILM is calculated using the formula below:

$$ILM = \ln\left(\exp(1) - 1 + \left(\frac{15 * sum\ op.risk\ losses\ per\ year}{BIC}\right)^{0.8}\right)$$

[13] See Annex II for BIC calculation examples

[14] BI*12% marginal coefficient

50. LC is equal to 15x the average annual operational risk losses incurred over the previous ten years.

51. The RSA for operational risk capital notes that a bank that does not have ten years of high-quality loss data may use a minimum of five years of data to calculate the LC. General and specific criteria for loss identification, collection and treatment are outlined below.

52. The Authority has opted to utilise national discretion regarding the loss data set to be used to calculate the LC. This decision was based on the data submissions received as part of the RSA for operational risk capital consultation process. It was highlighted that operational losses from the later years after the great financial crisis do not reflect the level of losses experienced currently. This difference can be attributed to the enhancement of operational risk management and controls. As such, a bank is permitted to use five years of high-quality loss data, which will be built up to a ten-year high-quality loss data set.

53. A bank that does not have five years of high-quality loss data is required to calculate the capital requirement based solely on the BIC (e.g., ILM = 1).

54. The Authority may require a bank to calculate capital requirements using fewer than five years of losses if there is evidence to show that the ILM is greater than 1 and the Authority believes the losses are representative of the bank's operational risk exposure.

55. The Authority may also set the value of ILM equal to one for a bank if deemed appropriate. If this discretion is utilised, a bank would still be subject to the full set of disclosure requirements provided for under the RSA for operational risk capital.

56. A bank may request approval from the Authority to exclude certain operational loss events that are no longer relevant to the banking organisation's risk profile if such loss events are greater than 5% of the bank's average losses. The exclusion of internal loss events should be rare and supported by a strong justification. In evaluating the relevance of operational loss events to the bank's risk profile, the Authority will consider whether the cause of the loss event could occur in other areas of the bank's operations. The total loss amount and number of exclusions must be disclosed in accordance with the Pillar 3 requirements with appropriate narratives, including the total loss amount and number of exclusions.

57. Losses can only be excluded after being included in a bank's operational risk loss database for a minimum period of three years. Losses related to divested activities will not be subject to a minimum retention period.

D. GENERAL CRITERIA ON LOSS DATA IDENTIFICATION, COLLECTION AND TREATMENT

58. The proper identification, collection and treatment of internal loss data are essential prerequisites to capital calculation under the RSA for operational risk capital.

59. Internal loss data are most relevant when clearly linked to a bank's current business activities, technological processes, and risk management procedures. Therefore, a bank 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 loss data for operational risk capital calculation purposes.

60. For risk management purposes and to assist in supervisory validation and/or review, the Authority requires banks to map their historical internal loss data into the relevant supervisory categories.[15]

61. A bank'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 ≥ BM$10,000.

62. A bank must collect information about the reference dates of operational risk events, including:

    i) The date when the event happened or first began (date of occurrence);
    ii) Where available, the date on which the bank became aware of the event (date of discovery);
    iii) The date (or dates) when a loss event results in a loss, reserve or provision against a loss being recognised in the bank's income statement or profit and loss (P&L) accounts (date of accounting); and
    iv) In addition, the bank must collect information on recoveries of gross loss amounts as well as descriptive information about the drivers or causes of the loss event. The level of detail of any descriptive information should be commensurate with the size of the gross loss amount.

63. Operational loss events related to credit risk and accounted for in credit RWA should not be included in the loss data set. However, credit risk-related operational loss events that are not accounted for in credit RWA should be included.

64. Operational risk losses related to market risk are treated as part of operational risk for the purposes of calculating minimum regulatory capital under this framework and will, therefore, be subject to the standardised approach for calculation of operational risk capital.

E. SPECIFIC CRITERIA ON LOSS DATA IDENTIFICATION, COLLECTION AND TREATMENT

65. Building an acceptable loss dataset from available internal data requires that the bank develops policies and procedures to address several features, including gross loss definition, reference date and grouped losses.

66. Banks must be able to identify the gross loss amounts, non-insurance recoveries and insurance recoveries for all operational loss events. Banks should use losses net of recoveries (including insurance recoveries) in the loss dataset. However, recoveries can be used to reduce losses only after the bank receives payment.[16]

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

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[15] See The Basel Framework: Calculation of RWA for operational risk - General criteria on loss data identification, collection and treatment

[16] See Annex III for items to be included or excluded from gross loss computation of the loss data set

F. PILLAR 1 OPERATIONAL RISK CAPITAL REQUIREMENT

68. The operational risk capital (ORC) requirement is the product of the BIC and ILM, as shown by the formula below:

$$\mathbf{ORC} = \mathbf{BI} * \mathbf{ILM}$$

69. Operational RWA are equal to ORC * 12.5 multiplier.

70. A bank will be required to calculate the operational risk charge based on its audited annual financial results, with the new operational risk charge being reflected in the Prudential Information Return of the first quarter of the next financial year.[17]

G. LEVEL OF APPLICATION

71. At a consolidated level, the standardised approach calculations use fully consolidated BI figures, which nets all intragroup income.

72. At a solo level, the calculations use BI figures for the banks consolidated at that particular subsidiary level.

H. RSA FOR OPERATIONAL RISK CAPITAL IMPLEMENTATION DATE

73. The revised standardised approach methodology for the calculation of operational risk capital became effective on 1 January 2023.

[17] For example, a 31 December year-end would see new ORC reported in next 31 March PIR

VI. STANDARDISED APPROACH FOR CALCULATING PILLAR 1 CREDIT RISK CAPITAL CHARGE

74. In May 2022, the Authority published a public consultation paper outlining the proposed adoption of the revised standardised approach for calculating Pillar 1 credit risk capital charges under The Basel Framework. The three-month consultative period ended on 19 August 2022. The Authority has adopted the standardised approach for credit risk as set out in The Basel Framework. The Authority has further adopted several national discretions outlined in the following paragraphs. This new standard repeals and replaces the current Pillar 1 credit risk capital charge methodology as outlined in The Revised Framework for Regulatory Capital Assessment.

A. DUE DILIGENCE REQUIREMENTS

75. The Authority requires banks to establish and maintain effective credit risk management processes[18]. This should include policies and procedures on due diligence to ensure the bank has an adequate understanding of potential counterparties at origination and thereafter, due diligence on a regular basis[19] of existing counterparties, including their risk profile and characteristics.

76. The sophistication of due diligence should be appropriate to the size and complexity of a bank's activities and the nature and sophistication of the counterparty. A bank must also take reasonable and adequate steps to assess the operating and financial performance and trends through internal credit analysis.

77. A bank must be able to access information about its counterparties on a regular basis to complete due diligence analyses.

78. Due diligence on exposures to entities who are part of consolidated groups should, to the extent possible, be performed at the solo entity level to which there is a credit exposure. In evaluating the repayment capacity of the solo entity, a bank is expected to take into account the support of the group and the potential for the solo entity to be adversely impacted by problems in the group.

79. Each bank should have effective internal policies, processes, systems and controls in place to ensure that the appropriate risk weights are assigned to counterparties. In addition, the bank must be able to demonstrate to the Authority that its due diligence analysis is appropriate. As part of the supervisory review, the Authority will seek to ensure that a bank has appropriately performed this analysis and will take supervisory measures where it has not been done.

80. When applying risk weights to credit risk exposures based on external credit ratings, banks must perform due diligence to ensure that the external ratings appropriately and conservatively reflect the creditworthiness of the counterparty exposure. If the 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 should not result in the application of a lower risk weight than that determined by the external rating.

[18] The Management and Control of Credit Risks and the Implementation of the Statutory Provisions for Large Exposures
[19] At least annually

B. EXPOSURES TO SOVEREIGNS

81. Claims on sovereigns (overseas central governments) should be weighted based on ratings assigned by eligible External Credit Assessment Institutions (ECAI) as follows:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B and Unrated	Below B-
Risk weight	0%	20%	50%	100%	150%

82. Claims on the Government of Bermuda that are both denominated and funded in Bermuda dollars or US dollars will be allocated a risk weight one category below the applicable weighting based on the external ratings. The Authority will also permit the same treatment for claims on other sovereigns where the relevant supervisory authority applies the same treatment in its national rules.

83. For the purpose of risk-weighting claims on sovereigns, the Authority also recognises the country risk scores assigned by an Export Credit Agency (ECA). The Authority is prepared to recognise ECAs that publish their risk scores and subscribe to the Organisation for Economic Co-operation and Development (OECD) agreed methodology. Institutions may choose to use the risk scores published by individual ECAs that are recognised by the Authority, 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. These ECA risk scores correspond to risk-weight categories as detailed below:

ECA Risk Scores	0-1	2	3	4-6	7
Risk weight	0%	20%	50%	100%	150%

84. Exposures to the Bank for International Settlements, the International Monetary Fund, the European Central Bank, the European Union, the European Stability Mechanism and the European Financial Stability Facility may receive a 0% risk weight.

C. EXPOSURES TO NON-CENTRAL GOVERNMENT PUBLIC SECTOR ENTITIES

85. Claims on domestic Public Sector Entities (PSE) will be based on the external rating of the PSE or the Government of Bermuda in accordance with Option 1[20], and will receive a risk weighting based on the mapping below:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB- and Unrated	BB+ to B-	Below B-
Risk weight	20%	50%	100%	100%	150%

86. Subject to the Authority's approval, a bank may treat a domestic PSE as a direct exposure to the Government of Bermuda if it can prove that the domestic PSE retains the explicit financial support of the Government of Bermuda.

[20] See paragraph 20.11 of the Basel Framework

87. Claims on foreign PSE must be weighted at 100% other than where a bank can prove that the foreign PSE retain the explicit financial support of its relevant sovereign and that supervisory authority applies supervisory arrangements equivalent to those in Bermuda. In case of doubt as to the appropriate treatment, a bank should formally request the Authority's views on the appropriate treatment.

88. An 'equivalent regulator' for the purposes of this document is considered by the Authority to regulate banks under a Basel III regime in a manner that is broadly equivalent to the Authority's regulation. The Authority has not published a list of regulators that it deems equivalent and will only conduct such an assessment at the request of a bank.

D. EXPOSURES TO MULTILATERAL DEVELOPMENT BANKS

89. The Basel Framework provides a definition of a Multilateral Development Bank (MDB)[21]. MDBs that qualify for 0% risk weight must fulfil eligibility criteria as per The Basel Framework[22].

90. MDBs that currently qualify for a 0% risk weight are as follows:
    - i) The World Bank Group[23]
    - ii) Asian Development Bank
    - iii) African Development Bank
    - iv) European Bank for Reconstruction and Development
    - v) Inter-American Development Bank
    - vi) European Investment Bank
    - vii) European Investment Fund
    - viii) Nordic Investment Bank
    - ix) Caribbean Development Bank
    - x) Islamic Development Bank
    - xi) Council of Europe Development Bank
    - xii) International Finance Facility for Immunisation
    - xiii) Asian Infrastructure Investment Bank

91. For exposures to all other MDBs, banks will assign the following risk weights determined by the external ratings:

External rating	**AAA to AA-**	**A+ to A-**	**BBB+ to BBB- and unrated**	**BB+ to B-**	**Below B-**
Risk weight	20%	30%	50%	100%	150%

E. EXPOSURES TO BANKS

92. Exposures to banks will be risk-weighted based on the external credit risk assessment (ECRA) approach. External ratings must not incorporate assumptions of implicit government support unless the rating refers to a public bank owned by its government.

[21] Basel Framework: Calculation of RWA for credit risk - Exposures to multilateral development banks (MDBs)
[22] Basel Framework: Calculation of RWA for credit risk - MDBs eligibility criteria
[23] International Bank for Reconstruction and Development (IBRD), International Finance Corporation (IFC), Multilateral Investment Guarantee Agency (MIGA) and International Development Association (IDA)

93. Applicable risk weights are based on the tenor of the exposure and are applied as follows:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-
Exposures >3 months maturity	20%	30%	50%	100%	150%
Exposures ≤3 months maturity	20%	20%	20%	50%	150%

94. For exposures to unrated banks, the standardised credit risk assessment approach (SCRA) is used to determine the following risk weights:

Credit risk assessment of counterparty	Grade A	Grade B	Grade C
Exposures >3 months maturity	40%	75%	150%
Exposures ≤3 months maturity	20%	50%	150%

95. The criteria used to determine the Grade (A, B or C) of an unrated bank exposure are set out in The Basel Framework[24].

F. EXPOSURES TO SECURITIES FIRMS AND OTHER FINANCIAL INSTITUTIONS

96. 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 a level of supervision equivalent to those applied to banks (including capital and liquidity requirements). Exposures to securities firms and other financial institutions that do not meet these prudential standards requirements are treated as corporate exposures. Banks should seek clarification from the Authority if unsure of whether the regulatory and supervisory framework in a particular jurisdiction is equivalent to that of the Authority.

G. EXPOSURES TO COVERED BONDS

97. For rated eligible covered bonds, risk weights are as follows:

Issue-specific rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-
Risk weight	10%	20%	30%	50%	100%

98. For unrated eligible covered bonds, risk weights are based on the risk weight of the issuing bank:

Risk weight of issuing bank	20%	30%	40%	50%	75%	100%	150%
Risk weight	10%	15%	20%	25%	35%	50%	100%

[24] Basel Framework: Calculation of RWA for credit risk - Standardised Credit Risk Assessment Approach (SCRA)

99. Assets eligible for the above risk weights must fulfil the prescribed requirements detailed in The Basel Framework[25].

H. EXPOSURES TO CORPORATES

100. Exposures to corporates include exposures (loans, bonds, receivables, etc.) 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 corporate exposure class includes exposure to insurance companies and other financial corporates that do not meet the definition of exposures to banks, securities firms or other financial institutions. The corporate exposure class does not include exposure to individuals.

101. The Basel Framework breaks down corporate exposures into:
i) General corporate exposures; and
ii) Specialised lending.

102. For general corporate exposures, banks will continue to apply applicable risk weights aligned with the counterparty's external credit rating:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B- and Unrated	Below B-	Unrated, Investment Grade	CSME
Risk weight	20%	50%	75%	100%	150%	75%	85%

103. For unrated corporate exposures that a bank has determined will meet investment grade criteria, the bank can assign a risk weighting of 75%.

104. For the standardised approach to credit risk, the Authority defines a Corporate Small Medium Enterprise (CSME) as an entity with annual revenues of ≥BM$1 million and <BM$5 million. A bank is expected to confirm on at least an annual basis that each exposure classified as a CSME continues to meet this definition.

105. An unrated CSME exposure will be subject to a risk weight of 85%.

106. An unrated CSME exposure may be treated as a retail exposure and will be risk-weighted at 75% if it fulfils all the criteria for regulatory retail Small and Medium Enterprises (SME) exposures as follows:

i) The maximum aggregated unsecured (not secured by tangible security) loans to one party cannot exceed $1 million; and
ii) The repayment of small business loans of up to $1 million must be dependent on income from the business and not the salary of the borrower and may not exceed 50% of the business income.

107. Unrated general corporate exposures are to be risk-weighted at 100%. Due diligence is only required when a bank is seeking a 75% risk weight for an unrated exposure.

[25] Basel Framework: Calculation of RWA for credit risk - Exposures to covered bonds

108. The Authority expects a bank to have access to timely financial information of the borrowing entity (i.e., at least annual financial statements). This ensures appropriate risk weights are applied and supports prudent lending practices for SMEs. As the risk profile of a CSME or retail SME changes the exposure will need to be re-adjusted to meet the established criteria for regulatory SME exposures.

109. Specialised lending exposures include:

i) **Project finance** - Refers to the method of funding in which the lender looks primarily at the revenues generated by a single project;
ii) **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 loan is dependent on the cash flows generated by the specific assets that have been financed and pledged or assigned to the lender; and
iii) **Commodities finance** - Refers to short-term lending to finance reserves, inventories or receivables of exchange-traded commodities (e.g., crude oil, metals, or crops), where the loan will be repaid from the proceeds of the sale of the commodity, and the borrower has no independent capacity to repay the loan.

110. A corporate exposure will be treated as a specialised lending exposure if such lending possesses some or all of the following characteristics, either in legal form or economic substance:
i) Exposure is not related to real estate;
ii) Exposure is typical to an entity (e.g., SPV) created specifically to finance and/or operate physical assets;
iii) The borrower 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; and
iv) The terms of the obligation give the lender a substantial degree of control over the asset(s) and the income that it generates.

111. For rated specialised lending exposures, the risk weights applicable are as follows:

External rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-
Risk weight	20%	50%	75%	100%	150%

112. For unrated specialised lending exposures, the risk weights applicable are as follows:

Unrated specialised lending – Project finance	Risk weight
Pre-operational phase	130%
Operational phase[26]	100%
Operational phase (high quality) [27]	80%
Object finance	100%

[26] Basel framework: Calculation of RWA for credit risk - Specialised lending
[27] Basel framework: Calculation of RWA for credit risk - Specialised lending

Unrated specialised lending – Project finance	Risk weight
Commodities finance	100%

I. SUBORDINATED DEBT, EQUITY AND OTHER CAPITAL INSTRUMENTS

113. The treatment below applies to subordinated debt, equity and other regulatory capital instruments issued by either corporates or banks, provided that such instruments are not deducted from regulatory capital.

114. Equity exposures are defined based on the economic substance of the instrument. They include both direct and indirect ownership interests, whether voting or non-voting, in the assets and income of a commercial enterprise or of a financial institution that is not consolidated or deducted.

115. Debt obligations and other securities, partnerships, derivatives or other vehicles structured to convey the economic substance of equity ownership are considered an equity holding.

116. 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 investments that are subject to significant price volatility and are acquired in anticipation of future capital gains.[28]

117. Liabilities that meet the definition of 'other TLAC liabilities' and have not been deducted from regulatory capital are considered to be subordinated debt for the purposes of this paragraph.

118. The following risk weights are to be applied to the below exposures:

Exposure type	Risk weight
Subordinated debt	150%
Equity exposures to certain legislated programmes	100%
Speculative unlisted equity	400%
All other equity exposures	250%

119. The risk weight for investments in a significant minority or majority-owned and controlled commercial entity depends upon the application of two materiality thresholds:

i) Individual investments (15% of the bank's capital); and
ii) The aggregate of such investments (60% of the bank's capital).

120. Investments in a significant minority or majority-owned and controlled commercial entity below the materiality thresholds must be appropriately risk-weighted as per paragraph 118 above. Investments in excess of the materiality thresholds must be risk-weighted at 1250%.

[28] For example, investments in unlisted equities of corporate clients where the bank has or intends to establish a long-term business relationship and debt-equity swaps for corporate restructuring purposes would be excluded

J. RETAIL EXPOSURES

121. The retail exposure class includes the following types of exposures:

i) Exposures to an individual person or persons; and
ii) Exposures to SMEs[29] that are treated as retail.

122. Regulatory retail exposures are defined as retail exposures that meet all of the criteria listed below[30]:

i) Product criterion
ii) Low value of individual exposures[31]
iii) Granularity criterion

123. Retail exposures include the following types of exposures:

i) Regulatory retail exposures to 'transactors';
ii) Regulatory retail exposures to those that do not qualify as 'transactors'; and
iii) 'Other retail' exposures.

124. Transactors are obligors in relation to facilities such as credit cards and charge cards where the balance has been repaid in full at each scheduled repayment date for the previous 12 months. In relation to overdraft facilities, obligors would also be considered as transactors if there have been no drawdowns over the last 12 months. The Authority expects that a bank can accurately monitor data to ensure accuracy in allocating retail exposures to this category of retail exposures.

125. If a bank is unable to track such data, all exposures that meet all the requirements in paragraph 122 above should be included in the 'non-transactor' risk weight bucket.

126. The Authority expects a bank to be able to determine on at least a quarterly basis, whether a credit and/or charge card account is either a transactor or a non-transactor account. This is to ensure the accuracy of the classification as an annual review might not be reflective of repayment trends in the previous 12 months.

127. Exposures to an individual person or persons that do not meet all of the regulatory retail criteria above should be 24ecognized24 as 'other retail'.

128. The following risk weights are applicable based on retail exposure type:

Exposure type	Risk weight
Transactors	45%
Non-transactors	75%
Other retail	100%

[29] Defined as non-financial small business customers with annual revenues ≤$1M
[30] For detailed criteria, see Basel Framework: Calculation of RWA for credit risk - Retail exposure class
[31] The maximum aggregated retail exposure to one counterparty cannot exceed an absolute threshold of $1M

K. REAL ESTATE EXPOSURES

129. The real estate exposure asset class consists of:

i) Exposures secured by real estate that is classified as 'regulatory real estate' exposures (e.g., residential and commercial);
ii) Exposures secured by real estate that is classified as 'other real estate' exposures; and
iii) Exposures that are classified as 'land acquisition, development and construction' (ADC) exposures.

130. For an exposure secured by real estate to be classified as a "regulatory real estate" exposure, the loan must meet the following requirements[32]:

i) *Finished property* – The property securing the exposure must be fully completed;
ii) *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 bank to realise the value of the property within a reasonable timeframe;
iii) *Claims over the property* – The loan is a claim over the property where the lender bank holds a first lien over the property, or a single bank holds the first lien and any sequentially lower-ranking lien(s) (i.e., there is no intermediate lien from another bank) over the same property;
iv) *Ability of borrower to repay* – Borrowers must meet the requirements set according to paragraph 144 and 145 below;
v) *Prudent value of property* – The property must be valued according to the criteria in paragraphs 143 to 145 below for determining the value in the Loan To Value (LTV) ratio. Moreover, the value of the property must not depend materially on the performance of the borrower; and
vi) *Required documentation* – All the information required at loan origination and for monitoring purposes must be properly documented, including information on the borrower's ability to repay and the valuation of the property.

131. Regulatory residential real estate exposure is defined as an exposure that is secured by a property that has the nature of a dwelling and satisfies all applicable laws and regulations, enabling the property to be occupied for housing purposes. Residential real estate exposures that are not materially dependent on cash flows generated by the property are classified as General Residential Real Estate Exposures (GRRE).

132. Regulatory commercial real estate exposure is an exposure that is not a regulatory residential real estate exposure. Commercial real estate exposures that are not materially dependent on cash flows generated by the property are classified as General Commercial Real Estate Exposures (GCRE).

133. Regulatory real estate exposures (both residential and commercial) are recognized as exposures 'materially dependent on cash flows generated by the property[33]' when the prospects

[32] See eligibility criteria in The Basel Framework: Calculation of RWA for credit risk - Real estate exposure class

[33] These cash flows would generally be lease or rental payments

for servicing the loan materially depend on the cash flows generated by the property securing the loan rather than on the underlying capacity of the borrower to service the debt from other sources. Accordingly, for residential real estate, these exposures will be classified as Income Producing Residential Real Estate (IPRRE), and for commercial real estate, these exposures will be classified as Income Producing Commercial Real Estate (IPCRE).

134. For the purposes of determining whether a regulatory real estate exposure is materially dependent on cash flows generated by the property, the Authority has opted to adopt a >50% rental income/total cash flow ratio. As a reminder, the requirement to apply a 30% haircut to rental income for TDSR calculation purposes remains in effect as per the Authority's LTV/TDSR Guidance.

135. For IPRRE or IPCRE to an individual borrower, it is expected that cash flows are reviewed at least at the time of underwriting, in the event of a refinancing request, as well as if the loan terms are subject to restructuring (whether this be a troubled debt restructure or other). For IPCRE exposures where the borrower is an SPV or other commercial entity, it is prudent and standard practice to ensure that such a borrower provides updated financial information on a frequent basis.

136. The following types of regulatory real estate exposures are not classified as exposures that are materially dependent on cash flows generated by the property:

i) An exposure secured by a property that is the borrower's primary residence;
ii) An exposure secured by an income-producing residential housing unit that is limited to a capacity of one to four families;
iii) 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 its members the use of a primary residence in the property, securing the loans; and
iv) An exposure secured by residential real estate property to public housing companies and not-for-profit associations regulated under national law, which exist to serve social purposes and to offer tenants long-term housing.

137. ADC exposures refer to loans to a company or Special Purpose Vehicle (SPV) for financing any land acquisition for development and construction purposes or the development and construction of any residential or commercial property. ADC exposures can be treated as residential real estate exposures (GRRE or IPRRE) for residential real estate loans secured by residential property or land under construction if:
i) The construction is for a one to four-family housing unit and is the primary residence of the borrower; and
ii) The loan is not directly or indirectly financing the land acquisition.

138. Other real estate exposures: These are exposures that do not qualify as regulatory real estate exposures or ADC exposures as per the above criteria. Any exposures that fall into this category will be risk-weighted at 150%.

Loan-to-value (LTV) and total debt service ratio (TDSR)

139. Banks must establish and implement prudent underwriting policies with respect to the

issuance of real estate loans. These will include defined metrics such as TDSR and LTV ratios.

140. Where repayment of a real estate loan is materially dependent on cash flows generated by the property, underwriting policies must include relevant metrics and treatment (e.g., haircuts on rental income, etc.).

141. The LTV ratio is the amount of the loan divided by the value of the real estate. The value of the real estate will be maintained at the value measured at origination unless the Authority elects to require banks to revise the real estate value downward.

142. The value must be adjusted if an extraordinary, idiosyncratic event occurs, resulting in a permanent reduction of the real estate value. Modifications made to the underlying real estate that unequivocally increase its value could also be considered in the LTV. When calculating the LTV ratio, the loan amount will be reduced as the loan amortises. The LTV ratio must be prudently calculated in accordance with the following requirements:

i) *Amount of loan* – Includes the outstanding loan amount and any undrawn committed amount of the loan. The loan amount must be calculated gross of any provisions and other risk mitigants, except for pledged deposit accounts with the lending bank that meets all requirements for on-balance sheet netting and has been unconditionally and irrevocably pledged for the sole purpose of redemption of the loan; and
ii) *Value of the real estate* – The valuation must be appraised independently using prudently conservative valuation criteria. To ensure that the value of the real estate is appraised in a prudently conservative manner, the valuation must exclude expectations of 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 loan.

143. The valuation of real estate should always be conducted by an accredited valuer and/or valuation firm and not the bank itself. Also, valuations would not be considered to be independent if the valuer is part of or linked to the same firm that is selling the property in question. Independent valuations received from a third party should be reviewed outside of the first-line lending functions to determine if the value is appropriate to the property and commensurate with the real estate trends noted by a bank.

144. While the LTV and TDSR are pertinent credit factors to be considered when underwriting a real estate loan, other factors, such as the borrower's employment stability, credit history and condition of the collateral, should also be documented in the loan file with evidence of how these elements were incorporated into the final lending decision.

145. Minimum LTV and TDSR jurisdictional requirements are outlined in the guidance issued by the Authority[34].

Regulatory real estate risk weight treatment

146. For all regulatory real estate exposures, a bank is required to use the whole loan approach, which sees the total outstanding loan exposure allocated to a risk weight bucket based on the LTV of the loan.

[34] Supervisory Loan to Value Limits and Supervisory Guidelines on Total Debt Service Ratios – May 2014

147. For GRRE exposures, the applicable risk weights are as follows:

LTV	**≤50%**	**>50% ≤60%**	**>60% ≤80%**	**>80% ≤90%**	**>90% ≤100%**	**>100%**
Risk weight	20%	25%	30%	40%	60%	90%

148. For IPRRE exposures, the applicable risk weights are as follows:

LTV	**≤50%**	**>50% ≤60%**	**>60% ≤80%**	**>80% ≤90%**	**>90% ≤100%**	**>100%**
Risk weight	30%	35%	45%	60%	75%	105%

149. For GCRE exposures, the applicable risk weights are as follows:

LTV	**≤60%**	>60%
Risk weight	65%	85%

150. For IPCRE exposures the applicable risk weights are as follows:

LTV	**≤60%**	**>60% ≤80%**	>80%
Risk weight	70%	90%	110%

151. Loans which do not meet the criteria to be classified as regulatory real estate exposures will be classified as 'other' real estate and subject to a 150% risk weight.

152. The risk weight for all ADC exposures is 100%.

L. SECURITISATIONS EXPOSURES

153. The Basel Framework incorporates a hierarchy of approaches to be used by banks to determine appropriate risk weights for securitisation exposures:

i) Securitisation of internal ratings-based approach;
ii) Securitisation of external ratings-based approach (ERBA); and
iii) Securitisation standardised approach.

154. Preferential risk weights for securitisation exposures introduce the Simple, Transparent and Comparable (STC) framework. The STC criteria are intended to help transaction parties, including originators, investors and other parties with fiduciary responsibility, thoroughly evaluate the risks and returns of a particular securitisation and enable a more straightforward comparison across securitisation products within an asset class.

155. STC framework definitions are as follows:

i) *Simplicity* – Refers to the homogeneity of underlying assets with simple characteristics and a transaction structure that is not overly complex;
ii) *Transparency* – Provides investors with sufficient information on the underlying assets, the structure of the transaction and the parties involved in the transaction. Such transparency will permit a more thorough understanding of the risks involved; and
iii) *Comparability* – Criteria promoting comparability could assist investors in understanding such investments and enable a more straightforward comparison across securitisation products within an asset class.

156. Responsibility for determining if a securitisation exposure is STC compliant lies with the bank that retains the exposure. For securitisation exposures deemed STC compliant, the bank must be prepared to provide the Authority with the relevant supporting information used by the bank that led them to that conclusion.

157. STC criteria must be met at all times. As such, banks must ensure that they periodically review their securitisation exposures and identifyany developments that may invalidate the previous compliance assessment. The Authority will seek to verify compliance with the STC criteria as part of the Supervisory Review and Evaluation Process.

158. The Authority has opted to adopt the ERBA treatment for securitisations.

159. Banks shall use the formula outlined in The Basel Framework[35] to determine tranche thickness.

160. Calculation of tranche maturities includes a floor of one year and a cap of five years. Banks shall use a linear interpolation between the risk weights for one and five years to account for tranche maturity. The Authority will provide the interpolation calculation templates to be used.

161. To ensure the appropriate allocation of risk weights for securitisation exposures, the Authority would expect a bank to perform a calculation of tranche thickness at the time of purchase. The bank should also continue to monitor the exposure through the time it remains on the balance sheet to confirm that there are no material impairments that would impact the risk-weighting of the exposures.

162. Under the ERBA, the following risk weights will apply for short-term ratings:

External credit rating	A-1/P-1	A-2/P-2	A-3/P-3	All other ratings
Risk weight	15%	50%	100%	1,250%

163. For exposures with long-term ratings, or when an inferred rating based on a long-term rating is available, the risk weights depend on:

[35] Basel Framework: Calculation of RWA for credit risk - External ratings based approach

i) The external rating grade or an available inferred rating;
ii) The seniority of the position;
iii) The tranche maturity; and
iv) In the case of non-senior tranches, the tranche thickness.

164. For non-STC compliant long-term exposures, the following risk weights will be applied:

Rating	Senior tranche		Non-senior (thin) tranche	
	Tranche maturity		Tranche maturity	
	1 year	5 year	1 year	5 year
AAA	15%	20%	15%	70%
AA+	15%	30%	15%	90%
AA	25%	40%	30%	120%
AA–	30%	45%	40%	140%
A+	40%	50%	60%	160%
A	50%	65%	80%	180%
A–	60%	70%	120%	210%
BBB+	75%	90%	170%	260%
BBB	90%	105%	220%	310%
BBB–	120%	140%	330%	420%
BB+	140%	160%	470%	580%
BB	160%	180%	620%	760%
BB–	200%	225%	750%	860%
B+	250%	280%	900%	950%
B	310%	340%	1050%	1050%
B–	380%	420%	1130%	1130%
CCC+/CCC/CCC–	460%	505%	1,250%	1,250%
Below CCC–	1,250%	1,250%	1,250%	1,250%

165. For STC-compliant long-term exposures, the following risk weights will be applied:

Rating	Senior tranche		Non-senior (thin) tranche	
	Tranche maturity		Tranche maturity	
	1 year	5 year	1 year	5 year
AAA	10%	10%	15%	40%
AA+	10%	15%	15%	55%
AA	15%	20%	15%	70%
AA–	15%	25%	25%	80%
A+	20%	30%	35%	95%
A	30%	40%	60%	135%
A–	35%	40%	95%	170%
BBB+	45%	55%	150%	225%
BBB	55%	65%	180%	255%
BBB–	70%	85%	270%	345%
BB+	120%	135%	405%	500%
BB	135%	155%	535%	655%
BB–	170%	195%	645%	740%
B+	225%	250%	810%	855%
B	280%	305%	945%	945%

Rating	Senior tranche		Non-senior (thin) tranche	
	Tranche maturity		Tranche maturity	
	1 year	5 year	1 year	5 year
B–	340%	380%	1,015%	1,015%
CCC+/CCC/CCC–	415%	455%	1,250%	1,250%
Below CCC–	1,250%	1,250%	1,250%	1,250%

166. Securitisation exposures must always remain STC compliant, and a bank must conduct a review. Records of the details of the review procedures and findings must be maintained and made available to the Authority upon request.

M. PAST DUE LOANS/DEFAULTED EXPOSURES

167. This category is defined as an exposure past due for more than 90 days or an exposure to a defaulted borrower.

168. A defaulted borrower is a borrower in respect of whom any of the following events have occurred:

i) Any material credit obligation that is past due for more than 90 days. Overdrafts will be considered as being past due once the customer has breached an advised limit or been advised of a limit smaller than the current outstandings;
ii) Any material credit obligation that is on non-accrued status (e.g., the lending bank no longer recognises accrued interest as income or, if recognised, makes an equivalent amount of provisions);
iii) A write-off or account-specific provision that is made as a result of a significant perceived decline in credit quality subsequent to the bank taking on any credit exposure to the borrower;
iv) Any credit obligation is sold at a material credit-related economic loss;
v) A distressed restructuring of any credit obligation (i.e. a restructuring that may result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or (where relevant) fees) is agreed by the bank;
vi) The borrower's bankruptcy or a similar order in respect of any of the borrower's credit obligations to the banking group has been filed;
vii) The borrower has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of any of the credit obligations to the banking group; or
viii) Any other situation where the bank considers that the borrower is unlikely to pay its credit obligations in full without recourse by the bank to actions such as realising security.

169. For retail exposures, the definition of default can be applied at the level of a particular credit obligation rather than at the level of the borrower. As such, default by a borrower on one obligation does not require a bank to treat all other obligations to the banking group as defaulted.

170. Defaulted residential real estate exposures where repayments do not materially depend on cash flows generated by the property (GRRE exposures) securing the loan shall be risk-weighted net of specific provisions and partial write-offs at 100%.

171. The unsecured portion of any loan that is past due for more than 90 days, net of specific

provisions, including partial write-offs, will be risk-weighted as follows:

Specific provision rate (of outstanding loan balance)	<20%	≥20%	≥50%
Risk weight	150%	100%	50%

N. OTHER BALANCE SHEET EXPOSURES

172. Under the standardised approach for credit risk, other balance sheet exposures include the following:

i) Tangible fixed assets; and
ii) Other, including pre-payments and debtors.

173. Tangible fixed assets will be subject to a risk weight of 100%.

174. Other, including pre-payments and debtors, will be risk-weighted based on the risk weight of the underlying party. Unallocated amounts, including unallocated interest, will be subject to a risk weight of 100%. This includes unrestricted fixed income investment funds. Risk weights for this balance sheet item are as follows:

Risk weight of underlying counterparty	0%	20%	35%	50%	75%	100% & unallocated amounts	150%
Risk weight	0%	20%	35%	50%	75%	100%	150%

O. RISK WEIGHT MULTIPLIER TO CERTAIN EXPOSURES WITH CURRENCY MISMATCH

175. For unhedged[36] retail and residential real estate exposures to individuals where the lending currency differs from the currency of the borrower's source of income, banks will apply a 1.5 times multiplier to the applicable risk weight according to the treatment of retail and GRRE exposures, subject to a maximum risk weight of 150%.

176. The Authority will allow an exemption from applying the 1.5 times risk weight multiplier to unhedged retail and residential real estate exposures that comprise less than 5% of the aggregate outstanding balance of these respective categories of the loan portfolio. A bank must continue to monitor this currency mismatch to ensure that the unhedged exposure remains below the 5% threshold. In the event that these unhedged exposures exceed the threshold, the 1.5 times risk-weight multiplier must be applied to the total unhedged exposures' risk weights.

177. US dollar/Bermuda dollar currency mismatches within these portfolios will not be subject to a risk weight multiplier due to the existing peg between the two currencies. Where the bank has exposures that exist in jurisdictions that apply a similar pegged foreign exchange policy, it

[36] An unhedged exposure refers to an exposure to a borrower that has no natural or financial hedge against the foreign exchange risk resulting from the currency mismatch between the currency of the borrower's income and the currency of the loan

can seek approval to exempt such exposures from the risk-weight multiplier, if such exposures do not already meet the 5% de minimis threshold noted in paragraph 176.

P. OFF-BALANCE SHEET EXPOSURES

178. Both market and non-market-related off-balance sheet (OBS) exposures are converted into credit exposure equivalents through the use of credit conversion factors (CCF) as set out in The Basel Framework[37]. For undrawn commitment amounts, the exposure would be multiplied by the CCF.

179. Market-related OBS exposures include:

i) Interest rate-related contracts;
ii) Foreign exchange and gold contracts;
iii) Equities contracts;
iv) Precious metal contracts (other than gold);
v) Other commodity contracts (other than precious metals); and
vi) Other market-related contracts.

180. Market-related OBS exposures are converted into potential future credit exposures through the use of CCFs. The latter total is then added with current exposures[38] to determine the credit equivalent amount (CVA).

Q. CREDIT RISK MITIGATION

181. The credit risk mitigation (CRM) framework is applicable to the banking book exposures subject to the standardised approach for credit risk and is set out in The Basel Framework[39].

182. The effects of CRM will not be double-counted. Therefore, no additional supervisory recognition of CRM for regulatory capital purposes will be granted on claims for which an issue-specific rating is used that already reflects that CRM.

183. While the use of CRM techniques reduces or transfers credit risk, it simultaneously may increase other risks (residual risks)[40]. Therefore, it is imperative that banks employ robust procedures and processes to control these risks, including strategy, consideration of the underlying credit, valuation, policies and procedures, systems, control of roll-off risks and management of concentration risk arising from the bank's use of CRM techniques and its interaction with the bank's overall credit risk profile. Where these risks are not adequately controlled, the Authority may impose additional capital charges or take other supervisory action(s).

184. A haircut for currency mismatches will not be required for those transactions where the mismatch is between the US dollar and the Bermuda dollar. Where the bank has exposures that

[37] The Basel Framework: Calculation of RWA for credit risk - Off-balance sheet items
[38] The current exposure amount for each type of market-related off-balance sheet exposure is the sum of the positive mark-to-market value (or replacement cost) of each individual contract within each classification
[39] The Basel Framework: Calculation of RWA for credit risk - credit risk mitigation
[40] Including legal, operational, liquidity and market risks

exist in jurisdictions that apply a similar pegged foreign exchange policy, it can seek approval to exempt such exposures from the haircut if such exposures do not already meet the 5% de minimis threshold noted in paragraph 176.

R. OUTPUT FLOOR

185. As part of the finalisation of the Basel III reforms, the BCBS introduced the output floor, which is designed for banks that utilise internal models to calculate their RWA.

186. The ultimate aim of the output floor is to reduce excessive variability of RWA and to enhance the comparability of risk-weighted capital ratios. The output floor will ensure that a bank's capital requirements derived from the use of internal models do not fall below a certain percentage of capital requirements derived under standardised approaches. The output floor requires that risk-weighted assets must be calculated as the maximum of the bank's initial calculations using all approved approaches and 72.5% of total risk-weighted assets calculated using standardised approaches only.

187. Currently, the Authority has not approved the use of internal models to measure RWA and requires that all banks utilise the standardised approaches for credit, market and operational risks.

188. The output floor is to be applied to the following related approaches as set out in The Basel Framework[41]:

a) Credit risk: The standardised approach for credit risk;
b) Counterparty credit risk: The standardised approach for measuring counterparty credit risk (SA-CCR);
c) Credit valuation adjustment (CVA) risk: The standardised approach for credit valuation adjustment risk;
d) Securitisation framework: Based on either (i) the securitisation external ratings-based approach (SEC-ERBA) or (ii) the securitisation standardised approach (SEC-SA) and a risk-weight of 1250% where approaches (i) and (ii) cannot be used;
e) Market risk: The standardised approach for market risk. The SEC-ERBA, SEC-SA or a risk weight of 1250% must also be used when determining the default risk charge component for securitisations held in the trading book; and
f) Operational risk: The standardised approach for operational risk.

189. A bank must publish in Pillar 3 disclosures two sets of risk-weighted capital ratios: (i) ratios that exclude the capital floor in the calculation of RWA; and (ii) ratios that include the capital floor in the calculation of RWA. In addition, banks must disclose more granular information related to the calculation of their RWA under internally modelled and standardised approaches, as set out in the Pillar 3 disclosure framework.

190. The output floor was implemented as of 1 January 2024 with the following calibration phase-in arrangement:

[41] The Basel Framework: Risk based capital requirements - Calculation of the output floor

Date	Output Floor Calibration
1 January 2024	50%
1 January 2025	55%
1 January 2026	60%
1 January 2027	65%
1 January 2028	70%
1 January 2029	72.5%

191. The output floor will be calculated as per the following example:

Risk Type	Pre-Floor RWA	Standardised RWA	72.5% of standardised RWA
Credit risk:	62.0	124.0	89.9
- of which Asset Class A	45.0	80.0	58.0
- of which Asset Class B	5.0	32.0	23.2
- of which Asset Class C (not modelled)	12.0	12.0	8.7
Market risk	2.0	4.0	2.9
Operational risk (not modelled)	12.0	12.0	8.7
Total RWA[42]	76.0	140.0	101.5

192. During the phase-in period, the Authority may exercise national discretion to cap the incremental increase in a bank's total RWA that results from the application of the floor. This transitional cap will be set at 25% of a bank's RWA before the application of the floor. In the example shown in the preceding paragraph, the application of this national discretion by the Authority would cap the bank's RWA to 95 (i.e., a 25% increase of its pre-floor RWA of 76).

[42] As the floored RWA (101.5) are higher than the pre-floor RWA (76) in this example, the bank would use the former to determine the capital requirements

VII. PILLAR 2

193. The Authority will continue to utilise Pillar 2 to cover emerging identified risks that are not captured, or not fully captured, in existing Pillar 1 provisions and to address any departures from the Basel III standard. Potential areas where Pillar 2 may be deployed include but are not limited to the adjustment of RWA percentages and the continued integration of stress testing results to reveal potential capital shortfalls and to address those shortfalls through a capital charge.

194. The Authority has implemented the Interest Rate Risk in the Banking Book (IRRBB) standards set out in The Basel Framework[43] in its entirety except in one specific area. The only exception is that the Authority will not provide an option for banks to measure IRRBB using the standardised framework. Instead, the Authority is mandating that all banks at a consolidated level (and at an unconsolidated level where required by the Authority) develop their own Internal Measurement Systems (IMS) as set out in the revised standards to measure IRRBB for both changes in the Economic Value of Equity (EVE) and Net Interest Income (NII) with the expectation that banks will seek to develop a model that is proportionate to the size and complexity of their balance sheet.

A. Scope of Application

195. The Authority will require all banks to report IRRBB on the basis of their present Capital Assessment and Risk Profile (CARP) reporting requirements. Any bank presently reporting on just a consolidated basis for CARP purposes will continue to be allowed to apply this approach when calculating IRRBB requirements. However, the Authority reserves the right to require a bank to report all elements of their Pillar 2 requirements, including IRRBB, on both a solo and consolidated basis, where, in the opinion of the Authority there exists a material difference between solo and consolidated balance sheets.

B. IRRBB stress test scenarios

196. Banks must comply with the required IRRBB standards set out by the BCBS in relation to interest rate shocks and stress scenarios. Banks should use a wide and appropriate range of shocks that align with their business risk profile, as well as the six prescribed interest rate shock scenarios set out in The Basel Framework[44].

197. The Authority will continually assess the relevance of these scenarios and when it deems necessary, reserves the right to set additional scenarios.

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[43] The Basel Framework: Supervisory review process - Interest rate risk in the banking book (SRP31)

[44] The Basel Framework: Interest rate risk in the banking book - The standardised interest rate shock scenarios

VIII. LIQUIDITY

A. Liquidity Coverage Ratio

198. In January 2013, the BCBS released a revision to the Liquidity Coverage Ratio (LCR) proposal presented in the original Basel III Liquidity Paper[45]. This revision reflected various refinements to the LCR to address issues identified by national authorities and the international banking community since the LCR was originally published. The major areas of change were the following:

i) The expansion of the range of assets eligible for inclusion as High-Quality Liquid Assets (HQLA) for LCR purposes through the addition of a new category of Level 2B assets, which national supervisors may elect to recognise as HQLA in their local LCR regulations;
ii) A recalibration of the stress assumptions for some cash-flow items;
iii) An affirmation of the usability of the stock of HQLA by banks in times of stress; and
iv) The adoption of a phase-in timetable for implementing the LCR.

199. The Authority conducted extensive outreach with the sector concerning the technical implementation issues largely centred on deposit outflow assumptions, and as a result of that effort, the final guidance was refined for the local implementation of the LCR.

200. The Authority adopted the LCR implementation timetable consistent with that published by the BCBS beginning on 1 January 2015, with a minimum requirement of 60%, rising in equal annual steps to reach 100% on 1 January 2019.

201. The Authority adopted the haircuts for Level 2 assets set consistently with the January 2013 LCR revision, with a reservation by the Authority to employ national discretion in applying a higher haircut percentage or to restrict a class of assets from this group should unacceptable risk concentrations develop.

202. The Authority will use limited national discretion to widen Level 1 asset eligibility by allowing US dollar assets that qualify under Basel III as Level 1 assets to be fully eligible as Level 1 assets in Bermuda. The Authority will also allow a bank to include certain US dollar balances held in its qualifying correspondent bank to be included as a Level 1 asset to offset the fact that this jurisdiction does not have a central bank. This inclusion of qualifying correspondent bank balances will be subject to a 25% HQLA Level 1 limit and a demonstration to the bank's Board that the credit quality of the correspondent bank is satisfactory. In addition, the Authority requests that all Bermuda banks continue to work with their existing correspondent banks to identify conduits for bank funds to be placed at the Federal Reserve in the US, in a pass-through account or into a secured funding vehicle such as a reverse repurchase facility, backed with HQLA Level 1 assets.

203. The Authority also adopted the position that unsecured funding provided by non-financial small business customers, managed as retail exposures, and generally considered as having

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[45] Basel Committee on Banking Supervision, Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools, January 2013

similar liquidity risk characteristics to retail accounts, will be treated as such, provided that the total aggregated funding raised from each single small business customer is less than $500,000. It is further required that such deposits would only be eligible as stable deposits, subject to a 5% run-off, where among other criteria they are fully covered by deposit insurance. Small business deposits that do not meet the necessary eligibility criteria will be classified as less stable and subject to a 10% run-off assumption and those that exceed the $500,000 threshold will be treated as ordinary corporate deposits.

204. Formal reporting of the LCR commenced in the first quarter of 2015. The Authority may refine the assumptions in the LCR calculation based on the results of monitoring local impact and assessing international developments.

205. In 2021, as part of the process of ongoing reviews of liquidity standards, the Authority reviewed the treatment of deposit outflows related to:

i) Trust;
ii) Captive and inward insurance; and
iii) Fund management customer depositor types.

These were subject to a 100% outflow rate in the prior LCR framework. Following a consultative period and discussions with stakeholders, the Authority acknowledged that the actual behaviour of deposits from these financial counterparties is not reflective of the 100% outflow rate currently allocated to these deposit types. As such, the Authority has utilised a national discretion permitting banks to apply a national discretion to outflow rates for deposits from these financial counterparties subject to the Authority's approval.

206. The financial counterparties qualifying for this national discretion are defined as follows:

Trust:

207. A trust exposure, which may be included in the behavioural analysis, is one where the underlying counterparty is a company or a trust whose owner or beneficial owner, respectively, is a natural person or a group of closely related natural persons that was set up with the sole purpose of managing the wealth of the owners and does not carry out any other commercial, industrial or professional activity.

208. Operational deposits emanating from trust company depositors (e.g., the legal company themselves) are not to be included in the behavioural analysis or within the specific LCR line items for the purpose of this LCR amendment. When determining if a deposit is considered to be operational, please refer to The Basel Framework's definition[46].

Fund management counterparty exposures

209. Within the Basel LCR standard, a fiduciary is defined as "a legal entity that is authorised to manage assets on behalf of a third party. Fiduciaries include asset management entities such as pension funds and other collective investment vehicles." Therefore, deposits emanating/derived from counterparties that meet this definition would be eligible for inclusion in this LCR line item

[46] See definition of operational deposits in The Basel Framework: Liquidity Coverage Ratio - Operational deposits generated by clearing, custody and cash management activities

and within a bank's behavioural analysis.

210. Operational deposits emanating from fiduciaries (e.g., the legal company themselves) are not to be included in the behavioural analysis or within the specific LCR line items for the purpose of this LCR amendment.

Inward insurance counterparty exposures

211. This category of counterparty exposure includes all reinsurance counterparty exposures.

212. Deposits from these financial counterparties, normally considered unsecured wholesale funding provided by business customers, may be subject to run-off rates applicable to more stable deposits. This treatment will be subject to meeting all necessary eligibility criteria, including ongoing validation. Any deposit outflow departures from the Basel III standard will only be considered upon the production of a deposit behavioural analysis, refreshed at least annually, with a conclusion drawn by the bank as to the appropriate outflow to be assigned to that segment. For behavioural analysis, banks are required to use a minimum of ten years of relevant data. The Authority will review the behavioural analyses and if justified by the analyses, formally communicate to the bank an outflow rate more favourable than 100%, which will be utilised for the next 12 months or until the Authority provides alternative guidance.

213. This national discretion became effective 1 April 2022.

B. Net Stable Funding Ratio

214. On 31 October 2014, the BCBS published its final standard for the Net Stable Funding Ratio (NSFR)[47]. On 22 June 2015, the BCBS issued its final NSFR disclosure standard. This aims to improve the transparency of the NSFR requirements, reinforce the Principles of Sound Liquidity Risk Management and Supervision (Sound Principles), strengthen market discipline and reduce uncertainty in the markets as the NSFR is implemented.

215. The Authority supports the BCBS' objective of strengthening liquidity frameworks for banking institutions. As set out in the Basel III for Bermuda Banks – Final Rule 2015, it was always the Authority's intention to adopt the proposed NSFR standards and implementation deadlines. In 2015, the BMA implemented the LCR to promote the short-term resilience of a bank's liquidity profile under stress periods. The NSFR complements these existing LCR requirements requiring banks to ensure they also fund their balance sheets with stable funding sources to reduce funding risk over a longer-term horizon.

216. The section below sets out the Authority's requirements for the application of NSFR for banks and banking groups in Bermuda. These requirements were drafted following consultation with Bermuda's banking sector while also having regard for such factors as the lack of a lender of last resort within the jurisdiction, protecting depositors within the limitations of the current deposit insurance scheme, financial stability considerations and the Authority's mandate to protect the reputation of Bermuda as an international financial centre.

Scope of application of NSFR rules

217. The Authority requires all banks to report their NSFR on both a consolidated and

[47] Basel Committee on Banking Supervision, Consultative Document, Basel III: The Net Stable Funding Ratio, January 2014

unconsolidated basis.

NSFR implementation and reporting frequency

218. Both the NSFR and its disclosure requirements became effective for Bermuda banks and banking groups from 1 January 2018. Banks commenced formal submission of their NSFR returns on a quarterly basis starting with the quarterly returns for the period ended 31 March 2018.

NSFR public disclosure

219. The Authority requires all banks to publicly disclose their NSFR within their respective semi-annual Pillar 3 submissions, commencing with the Pillar 3 report for the period ended 30 June 2018. The Authority adopted the revised Basel Pillar 3 templates, which include a standardised template for NSFR disclosures.

NSFR minimum requirements

220. The NSFR is defined as the amount of available stable funding relative to the amount of required stable funding. The Authority has set the minimum NSFR at 100%, which means that on an ongoing basis a bank must retain stable funding sources at least equal to that of its assets which require funding. While the NSFR minimum is established at 100%, the Authority would expect bank senior management to set an internal buffer over and above this minimum requirement and be able to demonstrate why the quantum of this buffer is appropriate for their institution.

221. The Authority will implement the NSFR and disclosure standards set by the BCBS in its entirety except where the Authority believes applying a national discretion is more appropriate.

NSFR national discretions

222. The Authority is using national discretion to:

i) Widen Level 1 HQLA eligibility by allowing US dollar assets that qualify under Basel III as Level 1 assets to be fully eligible as Level 1 assets in Bermuda; and
ii) Allow unencumbered US dollar balances held with its qualifying correspondent banks to be included as Level 1 HQLA. The inclusion of these unencumbered qualifying correspondent bank balances as HQLA level 1 assets will be subject to a 25% HQLA level 1 limit and a demonstration to the bank's board of directors that the credit quality of the correspondent bank is satisfactory.

Super-equivalence

223. When calculating available stable funding, the Authority is super-equivalent to BCBS standards on deposits/funding provided by a non-financial small business in excess of $500,000 in aggregate with a tenor of less than one year. Any deposits/funding above this $500,000 level must be treated as deposits from non-financial corporate customers rather than as retail deposits.

IX. REGULATORY TREATMENT OF ACCOUNTING PROVISIONS – TRANSITIONAL ARRANGEMENTS AND THE INTERIM APPROACH

A. Scope and timing of application

224. The transitional arrangements and the interim approach used when determining general provisions that qualify to be treated as Tier 2 up to a limit of 1.25% of RWA apply to Bermuda banks as follows:

i) Effective 1 January 2018 – Applies to banks subject to International Accounting Standards Board (IASB) requirements; and
ii) Effective 31 March 2020 – Applies to banks subject to US Financial Accounting Standards Board (FASB) requirements.

B. The transitional arrangement offered by the Authority

225. The Authority will avail a transitional arrangement to Bermuda banks and banking groups upon receipt of a written request. The Authority did not mandate the use of the transitional arrangement. Its use was a decision for individual bank boards. The rationale for offering this transitional arrangement is to address any potential 'cliff effect' CET1 capital deterioration from the initial implementation (Day 1 implementation) of the new Expected Credit Loss (ECL) model.

226. The transitional arrangement must only adjust CET1 capital and applies only to provisions that are new under an accounting ECL model. The appropriate capital metric to be used is CET1 capital expressed as a money amount. So, for example, if the reduction in CET1 capital under the old incurred loss model was $10m and under the ECL model, the CET 1 reduction is now $15m, the impact of the new provisions would be a reduction of $5m in CET1 capital. This $5m would be the amount eligible for the transitional arrangement.

C. Transitional arrangement criteria

227. The Authority has:

i) Adopted a static approach in which the transitional amount is calculated just once at the point of transition;
ii) Allowed the transitional arrangement to run for a period of five years;
iii) Implemented a straight-line amortisation approach to calculating the transitional adjustment each year;
iv) Required banks to take into account tax effects when calculating the impact of ECL accounting on CET1 capital. Any Deferred Tax Asset (DTA) arising from a temporary difference associated with a non-deducted provision amount should be disregarded for regulatory purposes during the transitional period;
v) Mandated that any accounting provision amount not deducted from CET1 capital should:
    a. Not be included in Tier 2 capital even if the provision meets the definition of 'general' provisions;
    b. Not reduce exposure amounts in the Standardised approach even if it meets the definition of specific provision; and
    c. Not reduce the total measure in the leverage ratio.

D. Conditions to use the transitional arrangement

228. The first condition that must be met to use the transitional arrangement is that the bank's ECL accounting model needs to be independently validated prior to 1 January 2018 for IFRS banks and prior to 31 March 2020 for US GAAP banks, to determine the size of the initial CET1 capital transitional adjustment amount. This validation need not be done by the bank's external auditor but can be done by another external third party provided that the third party can demonstrate to the bank that it has the requisite skills and knowledge to do this validation work. The Authority acknowledges that, as this is a new model, the initial CET1 capital amount determined at this point might need to be revised subsequently (for example, at the first annual audit post-ECL model implementation).

229. The second condition that must be met is that any bank using the transitional arrangement must disclose publicly in part 2 of their Pillar 3 disclosure and on their website whether the transitional arrangement is being applied by the bank and the impact on the bank's regulatory capital and leverage ratio compared to the bank's fully loaded capital and leverage ratios had the transitional arrangement not been applied.

E. Calculation of the transitional adjustment amount

230. Where there is a reduction in CET1 capital due solely to implementation of the ECL model, this decline in CET1 capital can be spread for regulatory purposes over a five-year transitional period. The Authority has included an example below to illustrate this.

231. Consider Bank A that calculates that on the initial implementation of the ECL model on 'Day 1', there is a $5M reduction in CET1 capital. Under the transitional arrangement:

- Only 20% of this $5M reduction would be taken on day 1 of year 1 ($1M)
- 40% on day 1 of year 2 ($2M)
- 60% on day 1 of year 3 ($3M)
- 80% on day 1 of year 4 ($4M)
- The full $5m reduction is taken on day one of year five

232. Or put another way, each year of the transitional arrangement, the proportion of the total initial reduction in Bank A's CET1 capital is added back reduces on a straight-line basis so that:

- 80% of the total $5M reduction is added back on day 1 of year 1 ($4M)
- 60% of the total $5M reduction is added back on day 1 of year 2 ($3M)
- 40% of the total $5M reduction is added back on day 1 of year 3 $2M)
- 20% of the total $5M reduction is added back on day 1 of year 4 ($1M)
- No adjustment of the full $5M reduction would be taken on day one of year five

F. Supervisory assessment of banks using transitional approaches

233. The Authority, when undertaking supervisory assessments of the quantity of CET1 capital resources and other key regulatory ratios by a bank using a transitional arrangement, will use the adjusted CET1 capital number derived from the transitional arrangement rather than assessing CET1 capital on the basis that the transitional arrangement had not been applied.

G. New interim treatment of accounting provisions

234. Effective 1 January 2018, banks subject to the International Accounting Standards Board IFRS 9 ECL model must only classify as general provisions those assets that fall in stage 1 of the ECL model when determining those provisions that can qualify to be treated as Tier 2 capital up to a limit of 1.25% of RWA. Assets that fall in stages 2 and 3 of the ECL model must be classified as specific provisions and so do not qualify to be treated as Tier 2 capital.

X. PILLAR 3 AND PUBLIC DISCLOSURE

235. Pillar 3 forms a critical part of The Basel Framework and is commonly known as the market discipline pillar. The Basel Framework[48] describes the scope of application of disclosure requirements, along with requirements on the location, frequency, timing of reporting, assurance considerations and guiding principles on high-quality disclosures. The main objective of Pillar 3 is to complement the minimum capital requirements and supervisory review process by developing a set of public disclosure requirements. Such disclosures are designed to allow market participants to gain a better understanding of a bank's capital adequacy, risk exposures, risk management processes and liquidity positions, amongst others.

236. The Authority introduced Pillar 3 to the banking industry in conjunction with the rollout of Basel II in 2009. Pillar 3 requires all banks to publicly disclose, on a semi-annual basis, various quantitative and qualitative topics. The requirements for Pillar 3 disclosures have changed to address issues identified in the previous disclosure standards and include new standards related to the implementation of Basel III.

237. The Authority has adopted the Pillar 3 disclosure requirements as set out in The Basel Framework[49], with the exceptions outlined in paragraph 238, below.

238. The Authority does not require the following topics to be disclosed at this time:

i) Total Loss Absorbing Capital (TLAC);
ii) Macro-prudential supervisory measures; and
iii) Remuneration.

A. Scope of application

239. Pillar 3 disclosures apply at a consolidated level only.

B. Pillar 3 implementation and reporting frequency

240. The Authority first implemented the Pillar 3 disclosure requirements effective from 30 June 2018 and on a semi-annual basis thereafter. Pillar 3 disclosures must be posted as a standalone document within an easily accessible location on a bank's website 60 calendar days after the end of the period to which they relate.

241. The mandatory Pillar 3 disclosure templates can be found on the Authority's website (www.bma.bm).

[48] The Basel Framework: Disclosure requirements
[49] The Basel Framework: Disclosure requirements

ANNEX I: BASEL III IMPLEMENTATION TIMETABLE FOR BERMUDA[50]

All Dates are as of 1 January	2015	2016	2017	2018	2019
Minimum CET1 CAR	4.50%	4.50%	4.50%	4.50%	4.50%
Capital Conservation Buffer	0.00%	0.63%	1.25%	1.88%	2.50%
Minimum CET1 CAR plus Capital Conservation Buffer	4.50%	5.13%	5.75%	6.38%	7.00%
Minimum Total CAR	8.00%	8.00%	8.00%	8.00%	8.00%
Minimum Total CAR plus Capital Conservation Buffer	8.00%	8.63%	9.25%	9.88%	10.50%
Leverage Ratio	5.00%	5.00%	5.00%	5.00%	5.00%
LCR	60.00%	70.00%	80.00%	90.00%	100.00%

[50] Does not include the D-SIB buffer

ANNEX II: EXAMPLE OF BIC CALCULATIONS

Example 1

For a bank with revenues of $400M for the financial year under consideration, the BIC is calculated as follows:

BI ranges and marginal coefficients (BMA National Discretion)				**BIC (in BM$ in M)**
Bucket	**BI range (in BM$ in M)**	**Revenue (in BM$ in M)**	**BI marginal coefficients**	
1	≤100	100	12%	12.0
2	100 < BI ≤ 250	150	15%	22.5
3	>250	150	18%	27.0
Total		400		61.5

- The first $100M of revenue is multiplied by the 12% marginal coefficient
- The following $150M of revenue is multiplied by the 15% marginal coefficient
- The remaining $150M of revenue is multiplied by the 18% marginal coefficient
- Summing up the three buckets results in a BIC of $61.5M

Example 2

For a bank with revenues of $75M for the financial year under consideration, the BIC is calculated as follows:

BI ranges and marginal coefficients (BMA National Discretion)				**BIC (in BM$ in M)**
Bucket	**BI range (in BM$ in M)**	**Revenue (in BM$ in M)**	**BI marginal coefficients**	
1	≤100	75	12%	9.0
2	100 < BI ≤ 250	-	15%	-
3	>250	-	18%	-
Total		75		9.0

- The bank's total revenue of $75M falls into bucket 1 and thus is multiplied by 12%
- The total BIC is $9M
- A bank which falls into bucket 1 only does not consider historical loss experience and the ILM is set at 1

ANNEX III: INCLUSIONS AND EXCLUSIONS IN GROSS LOSS COMPUTATION

Items to be included in gross loss computation	Items to be excluded from gross loss computation
Direct charges, including impairments and settlements, to the bank's P&L (income statement) accounts and write-downs due to the operational risk event.	Costs of general maintenance contracts on property, plant or equipment.
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.	Internal or external expenditures to enhance the business after the operational risk losses: upgrades, improvements, risk assessment initiatives and enhancements.
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 (income statement). 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.	Insurance premiums.
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). Material 'timing losses' 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.	