

SUPERVISORY AND REGULATORY GUIDELINES: 2022 Capital Adequacy Issued: 15 April, 2005 Revised: 15 July 2022

GUIDELINES FOR THE MANAGEMENT OF CAPITAL AND THE CALCULATION OF CAPITAL ADEQUACY

TABLE OF CONTENTS

1.	INTRODUCTION	2
2.	PURPOSE	2
3.	APPLICABILITY	2
4.	DEFINITIONS	3
5.	RESPONSIBILITY FOR CAPITAL	4
6.	REGULATORY CAPITAL BUFFERS	6
7.	CAPITAL RECOVERY PLANS	6
8.	LEVERAGE RATIO	7
9.	CREDIT RISK: Calculation under Standardised Approach	8
10.	CREDIT RISK MITIGATION	10
11.	EXTERNAL CREDIT ASSESSMENT INSTITUTIONS ("ECAIs")	15
12.	OPERATIONAL RISK: Calculation under the Standardised Approach	19
13.	MARKET RISK: Calculation under Simple Standardised Approach	21
14.	REPORTING	28

1. INTRODUCTION

- 1. The Central Bank of The Bahamas ("the Central Bank") is responsible for the registration, licensing, regulation and supervision of supervised financial institutions ("SFIs") operating in and from within The Bahamas pursuant to the Central Bank of The Bahamas Act, 2020 ("CBA"), the Banks and Trust Companies Regulation Act, 2020 ("BTCRA"),
- 2. All SFIs are required to adhere to the Central Bank's licensing, regulation and prudential requirements and ongoing supervisory programmes, including periodic onsite inspections, and required regulatory reporting. SFIs are also expected to conduct their affairs in conformity with all other Bahamian legal requirements.

2. PURPOSE

3. These Guidelines outline the overall framework adopted by the Central Bank for assessing the adequacy of a SFI's capital. The Central Bank aims to ensure that all SFIs maintain a level of capital that is consistent with the risks to which they are exposed arising from their business activities. The Central Bank endorses the Basel Committee on Banking Supervision ("the Basel Committee") document of June 2006 titled *International Convergence of Capital Measurement and Capital Standards: A Revised Framework – Comprehensive Version* (Basel II); the December 2010 document titled *Basel III: A global regulatory framework for more resilient banks and banking systems" (revised June 2011)* and the December 2017 document titled *Basel III: Finalising Post Crisis Reforms* (Basel III). The Central Bank has adopted the Basel III framework as recommended by the Basel Committee which is consistent with the concept of proportionality, to the extent that it balances simplicity, comparability and risk sensitivity.

3. APPLICABILITY

- 4. These Guidelines apply to all banks and bank and trust companies incorporated in The Bahamas (collectively referred to as SFIs) and licensed or registered by the Central Bank of The Bahamas. These Guidelines do not apply to pure and nominee trust companies, branches of foreign banks, restricted banks and/or trust companies or managed branches. These Guidelines do not alter the minimum capital requirements for SFIs outlined in the *General Information and Guidelines for Licence Applications for Banks and/or Trust Companies*.
- 5. These Guidelines are to be read in conjunction with the:
 - (a) The Bahamas Capital Regulations, 2022 ("the Capital Regulations")
 - (b) Guidelines for the Internal Capital Adequacy Assessment Process for Licensees
 - (c) Guidelines for the Management of Operational Risk
 - (d) Guidelines for the Management of Market Risk

4. DEFINITIONS

6. For the purpose of these Guidelines:

"Banking book" means those positions in financial instruments not assigned to the trading book;

"Capital Buffer" means additional CET1 capital and includes, the conservation buffer, a systemic risk buffer, and any other Pillar 2 capital add-ons imposed from time to time;

"Capital recovery plan" means a written plan developed and submitted to restore the capital of the SFI within such period as may be prescribed by the Central Bank;

"Central Bank" means the Central Bank of The Bahamas preserved and continued pursuant to section 3 of the Central Bank of The Bahamas Act, 2020 (No. 24 of 2020);

"Common Equity Tier 1 Capital" or "CET1 Capital" means a component of Tier 1 capital that is mostly common stock held by a bank or other financial institution, which meets all of the criteria for classification as common equity for regulatory capital purposes net of regulatory adjustments;

"Credit risk" means any risk associated with a bank's on and off-balance sheet exposures, and includes any risk to the earnings or capital arising from the potential that a borrower or counterparty will fail to perform on a loan or extension of credit;

"Financial instrument" means any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments include both primary financial instruments (and cash instruments) and derivative financial instruments;

"General market risk" means a risk of loss arising from adverse changes in market prices;

"Hedge" means the process of counterbalancing risk from exposures to long and short positions in correlated instruments;

"Instrument" means the term used to describe financial instruments and commodities;

"Internal Capital Adequacy Assessment Process" or "ICAAP" means a formal process through which a SFI adequately identifies, measures, aggregates and monitors material risk, to ultimately build a risk profile that would become the basis for allocating economic capital i.e. the amount of capital that an institution holds and allocates internally to support the risks it takes on;

"notional position" means the result of decomposing real-world financial instruments into simpler positions that can be capitalised under the standardised approach. In most cases, notional positions will be equal to either the market value, the "notional value", or the discounted cash flows of the instrument; "notional value" means a derivative instrument is equal to the number of units underlying the instruments, multiplied by the current market value of each unit of the underlying;

"specific risk" means the risk of loss caused by an adverse price movement of a debt instrument or security due principally to factors related to the issuer;

"trading book" means those positions in financial instruments and commodities held either with trading intent or in order to hedge other elements of the trading book. Positions held with trading intent are those intentionally held for short-term resale and/or with the intent of benefiting from actual or expected short-term price movements or to lock in arbitrage profits, and may include for example proprietary positions, positions arising from client servicing (e.g. matched principal trading) and market making; and

"trading desk" means a separately managed business line within the SFI that follows defined trading strategies with certain instruments, with the goal of generating revenues or maintaining market presence while assuming and managing risk.

5. RESPONSIBILITY FOR CAPITAL

- 7. Beyond the minimum levels of capital specified in the Capital Regulations, it is the responsibility of the Board of Directors ("the Board") and Senior Management of the SFI to make regular assessments of a SFI's capital adequacy to ensure that its capital resources are appropriate for the level and nature of all the risks to which the SFI is exposed.
- 8. SFIs should have suitable systems in place to identify, measure and manage the risks associated with their activities, and to hold capital which is adequate for their overall risk profile.
- 9. As part of the process, SFIs must maintain and implement adequate capital planning, administered through an effective governance structure that sets out overall strategies for managing capital resources. The capital management plan should be consistent with the SFI's overall business plan and should include actions and procedures for monitoring compliance with the required capital adequacy ratios.
- 10. The capital planning process must cover at least a three year forward-looking time horizon. The underlying assumptions for the capital plan must be documented in a transparent and comprehensive manner to adequately reflect material risks.
- 11. An effective capital planning framework should include: budgeting, future profits, a dividend policy and other corporate actions foreseen by executive management to provide a reliable forecast of the available capital based on the SFI's business planning needs. This includes methods to raise new capital, and/or materially reduce risks requiring capital.
- 12. Consistent with Basel II and III, the approach used by the Central Bank for assessing a SFI's capital adequacy focuses on the following elements:
 - a. Credit risk associated with a SFI's on and off- balance sheet exposures;

- b. **Operational risk** arising from inadequate or failed internal processes, people and systems or from external events;
- c. **Market risk** associated with a SFI's on and off-balance sheet exposures arising from changes in market prices; and
- d. The form and quality of capital held by the SFI to support these exposures.
- 13. Consistent with the Board's responsibility for capital management, the capital standards also require that each SFI have an Internal Capital Adequacy Assessment Process ("ICAAP") that has been approved by its Board. The Board must be actively engaged in oversight of the ICAAP's implementation on an ongoing basis. Updates made to the ICAAP must be approved by the Board no less than every three years.
- 14. At a minimum, SFIs must incorporate the following features in their ICAAPs:
 - (a) A clearly documented capital projection of the capital needs of the SFI's business, approved by the Board. This will include factors such as anticipated balance sheet growth, acquisitions or divestitures, access to external capital resources, and dividend policy.
 - (b) A comprehensive assessment of all material risks, including risks not explicitly covered by regulatory capital requirements. These risk exposures include but are not limited to Credit risk, Market Risk, Interest Rate Risk, Liquidity Risk, and Operational Risk.
 - (c) A description of the key assumptions and methodologies used, including stress testing or scenario analysis relating to material risks and the interaction of those risks under stressed conditions.
 - (d) Adequate monitoring and reporting established to provide the Board and Senior Management with timely and relevant reports on the SFI's risk profile and capital needs.
 - (e) An internal control review established by the Board for assessing the various risks while establishing a method for monitoring compliance with internal policies.
 - (f) Effective control of the capital assessment process which includes an independent review and, where appropriate, the involvement of internal and external auditors.
- 15. As part of the ICAAP, SFIs are required to maintain and implement capital management plans setting out the overall strategy for managing capital resources over time. Internal target and trigger capital ratios must be set to alert management to potential breaches to the minimum capital and leverage requirements. SFIs must establish at least one CET1 and leverage ratio buffer (the management buffer) above relevant requirements set by the Central Bank, and must coordinate any capital recovery plans to this management buffer. SFIs are permitted to set more than one capital buffer or target range, provided that the SFI's capital management plans support these extra buffers and ranges.

6. **REGULATORY CAPITAL BUFFERS**

- 16. In accordance with the Basel III capital reforms, the Capital Regulations require SFIs to hold additional capital buffers, above the minimum level. This buffer is intended to promote the conservation of capital and the build-up of adequate buffers, which can be used to absorb losses during periods of financial and economic stress.
- 17. The size of the additional regulatory capital buffer in The Bahamas ranges from 2.5% to 9% of risk assets, depending on the type and systemic importance of any SFI. The additional buffers will comprise of
 - (a) the capital conservation buffer ("CCB") of 2.5% to 5% of risk-weighted assets, which must be held in the form of CET1 Capital at all times.
 - (b) a systemic risk buffer ranging from 0% to 4% of risk-weighted assets, which must also be held in the form of CET1 Capital at all times.
- 18. Where the capital adequacy ratio falls below the SFI's total capital requirement, the SFI must immediately produce a capital recovery plan that is acceptable to the Central Bank. This plan would normally combine urgent steps to raise new capital and/or reduce risks, with medium term actions to return the SFI to a sustainable capital position.
- 19. Should an SFI prove unable to produce and execute a capital recovery plan that is acceptable, the Central Bank may impose supervisory intervention measures including but not limited to dividend restrictions, payment restrictions, and operating restrictions.
- 20. In the event of a significant change (or deterioration) in the SFI's risk profile, or if the Central Bank is not satisfied with the SFI's capital adequacy, the Central Bank reserves the right to impose higher capital requirements or may impose other supervisory intervention measures in accordance with the *Central Bank's Ladder of Supervisory Intervention Guidelines*.

7. CAPITAL RECOVERY PLANS

- 21. Where the SFI is found to be in breach of its minimum capital requirement, the SFI will be required to develop and produce to the Central Bank, a capital recovery plan which will outline how the SFI intends to regain compliance with their stipulated capital requirements.
- 22. There is no prescribed format for the capital recovery plan. However, SFI's are expected to submit to the Central Bank a credible written report on the financial condition and future prospects of the SFI together with a plan of action which the SFI proposes to take. The capital recovery plan, should at minimum include the following information:
 - (a) what actions will be taken to restore CET1 Capital to the SFI's targeted minimum requirement;
 - (b) the amount and type of funding needed to bring the SFI into compliance with the target minimum requirement;
 - (c) the timeframe in which the actions would be carried out;
 - (d) in the case of Host-SFIs, the action plan must include for consideration the circumstances under which the SFI would seek additional capital from its parent;

- (e) in the case of Home-SFIs, the action plan must include triggers and/or scenarios for when the SFI would look to be acquired by another SFI, or otherwise seek a major capital injection;
- (f) a statement on whether there are any other dependencies for the capital recovery plan (such as approvals from the parent bank or home supervisor) and a contingency plan for those dependencies; and
- (g) the likely impact of the action plan on the growth prospects of the SFI.

8. LEVERAGE RATIO

- 23. The Basel III leverage ratio is designed to supplement the risk-based capital requirements. It is intended to:
 - (a) restrict the build-up of leverage in the banking sector to avoid damage to the broader financial system and the economy; and
 - (b) reinforce the risk-based requirements with a non-risk based "back stop" measure.
- 24. Commercial Banks (also known as Domestic Systemically Important Banks or "DSIBs") must meet a 6% leverage ratio minimum requirement, and all other SFIs must meet a 4% leverage ratio requirement.
- 25. A SFI's total exposure measure is the sum of the following exposures, as defined below:
 - (a) on-balance sheet exposures (including derivatives and securities financing transactions); and
 - (b) off-balance sheet exposures.
- 26. The exposure measure for the leverage ratio should generally follow financial accounting values. The exposure measure will be the sum of the following:

(a) On-balance sheet exposures

- (i) On-balance sheet exposures are to be included net of specific provisions or financial accounting valuation adjustments;
- (ii) Liability items must not be deducted from the leverage ratio exposure measure. For example, gains/losses on fair valued liabilities or financial accounting valuation adjustments must be included in the exposure measure; and
- (iii) Netting of loans and deposits are not allowed. Further, SFIs must not take account of credit risk mitigation techniques (e.g. physical or financial collateral and guarantees) to reduce the exposure measure.

(b) Off-balance sheet items

(i) These items will include commitments (including liquidity facilities), whether or not unconditionally cancellable, direct credit substitutes, acceptances and letters of credit. These items will be converted into the credit exposure equivalent by applying Credit Conversion Factors ("CCFs") to the commitment notional amounts, identical to the treatment of off-balance sheet exposures in the risk-based capital framework.

- 27. To ensure consistency, balance sheet assets or items deducted from CET1 Capital and regulatory adjustments (other than those related to liabilities) may also be deducted from the exposure measure.
- 28. Derivatives and securities financing transactions will be counted in the exposure measure as part of total assets, using the relevant financial accounting treatment.

9. CREDIT RISK: Calculation under Standardised Approach

- 29. The Basel Committee provides two methodologies for calculating risk-based capital requirements for credit risk: (1) the Standardised Approach, which assigns standardised risk weights to exposures using ratings of External Credit Assessment Institutions ("ECAIs") and (2) the Internal Ratings Based Approach, which allows SFIs to implement their own internal ratings system subject to the approval of national supervisors. The Standardised Approach is to be used by all SFIs.
- 30. In determining credit risk capital charges, SFIs must apply the prescribed risk weights to both on-balance sheet and off-balance sheet exposures. Exposures are to be risk-weighted net of specific provisions. Risk weights will be based on the risk rating assigned by eligible ECAIs. The Third Schedule of the Capital Regulations, details the list of recognised ECAIs. Further, Section 10 of these Guidelines outlines the criteria the Central Bank will use in recognising an ECAI as eligible for capital adequacy purposes. It also outlines key considerations related to the use of ratings assigned by eligible ECAIs.

Treatment of On-Balance Sheet Exposures

31. The Fourth Schedule of the Capital Regulations, specifies the risk weights for individual claims or exposures.

Treatment of Off-Balance Sheet Exposures

- 32. For off-balance sheet exposures, a SFI's total risk-weighted off-balance sheet credit exposures are calculated as the sum of the risk-weighted amounts of all its market related (i.e. derivative instruments) and non-market related (i.e. non-derivative instruments) transactions.
- 33. For market related off-balance sheet exposures, credit risk is the cost to the SFI of replacing the cash flow from the financial instrument used in the contract, in the event of default by the counterparty. Market related transactions¹ include the following:
 - Interest rate contracts these include single currency interest rate swaps, basis swaps, forward rate agreements, interest rate futures, interest rate options purchased and any other instruments of a similar nature;

¹ This includes market related transactions held in the banking and trading books.

- Foreign exchange contracts (including contracts involving gold) these include cross currency swaps (including cross currency interest rate swaps), forward foreign exchange contracts, currency futures, currency options purchased, hedge contracts and any other instruments of a similar nature;
- Equity contracts these include swaps, forwards, purchased options and similar derivative contracts based on individual equities or equity indices;
- Precious metal contracts (other than gold) these include swaps, forwards, purchased options and similar derivative contracts based on precious metals such as silver and platinum;
- Other commodity contracts (other than precious metals) these include swaps, forwards, purchased options and similar derivative contracts based on energy contracts, agricultural contracts and any other non-precious metal commodity contracts; and
- Other market-related contracts these include any contracts covering other items giving rise to credit risk.
- 34. The methodology for calculating credit equivalent amounts for market related contracts will not be applied. Where off-balance sheet exposures comprise of market related contracts or over-the-counter derivative assets, such exposures must be risk-weighted at 100%.
- 35. For non-market related off-balance sheet exposures, SFIs are required to apply CCFs. The categories of off-balance sheet items include guarantees, commitments, and similar contracts where the full notional principal amount may not be reflected on the balance sheet.
- 36. The credit equivalent amount for an off-balance sheet exposure is calculated using the following formula:

credit equivalent amount = credit conversion factor × notional principal amount

- 37. A two-step approach is used in order to derive the risk-weighted amounts:
 - (a) the nominal principal amounts of off-balance sheet items are multiplied by the CCFs; and
 - (b) the resulting credit equivalent amounts are multiplied by the risk weights applicable to the counterparty or by the type of asset.
- 38. SFIs should categorise and convert off-balance sheet exposures into credit exposure equivalents by using the appropriate CCF specified in Table 10 of the Capital Regulations. Any commitment to provide off-balance sheet facilities should be assigned the lower of the two applicable CCFs.

10. CREDIT RISK MITIGATION

- 39. SFIs use a number of techniques to mitigate the credit risks to which they are exposed. For example, exposures may be collateralised by first priority claims, in whole or in part with cash or securities, a loan exposure may be guaranteed by a third party or SFIs may agree to net loans owed to them against deposits from the same counterparty.
- 40. SFIs may use the following credit risk mitigation techniques to mitigate the credit risks to which they are exposed. Recognised techniques include
 - (1) collateralisation;
 - (2) netting; and
 - (3) guarantees
- 41. There are two methods of credit risk mitigation that may be used under the Basel framework the simple method and the comprehensive method. For the purposes of calculating risk-weighted assets, only the simple method must be applied to banking book exposures where recognised credit risk mitigation techniques have been used. In the simple method, the risk weight of collateral is substituted for the risk weight of the counterparty for the collateralised portion of an exposure (subject to a floor of 20%). Similarly, in the case of guarantees, the risk weight applicable to the credit protection is substituted for the risk weight applicable to the underlying exposure.

General Requirements for Credit Risk Mitigation

- 42. Credit risk mitigation techniques are only recognised if they meet the general requirements set out in the Fourth Schedule of the Capital Regulations, in determining the risk weight for an exposure.
- 43. While the use of the credit risk mitigation techniques reduces or transfers credit risk, it simultaneously may increase other risks (i.e. residual risks) such as legal, operational, liquidity and market risks. Therefore, it is imperative that SFIs employ robust procedures and processes to control these risks, including strategies, consideration of the underlying credit, valuation, policies and procedures, systems and control of roll-off risks, and management of concentration risk arising from the SFI's use of the CRM techniques and its interaction with the SFI's overall credit risk profile. Where the Central Bank is not satisfied that these risks are adequately controlled, it may impose additional capital charges or take other supervisory action.
- 44. SFIs may use the CRM technique to reduce the capital requirement for an exposure, where a transaction is secured by eligible collateral, guarantee or netting arrangements.
- 45. SFIs must have collateral management policies in place to control, monitor and report:
 - (a) the risk to which margin agreements exposes them (such as the volatility and liquidity of the securities exchanged as collateral);
 - (b) the concentration risk to particular types of collateral;
 - (c) the re-use of collateral (both cash and non-cash) including potential liquidity shortfalls resulting from the reuse of collateral received from counterparties;
 - (d) the surrender of rights on collateral posted to counterparties; and

- (e) has clear and robust procedures for timely liquidation of the collateral in the event of default.
- 46. Disclosure requirements must also be observed for SFIs to obtain capital relief in respect of any credit risk mitigation technique used.

Eligible Collateral and Guarantees

47. Collateral instruments and Guarantees eligible for recognition under the simple approach are set out in Fourth Schedule of the Capital Regulations.

Collateralised Transactions

- 48. A collateralised transaction is one in which:
 - (a) SFIs have a credit exposure or potential credit exposure; and
 - (b) the credit exposure or potential credit exposure is hedged in whole or in part by collateral posted by a counterparty or by a third party on behalf of the counterparty.
- 49. In addition to the general requirements for legal certainty outlined in the Capital Regulations, the legal mechanism by which collateral is pledged or transferred must ensure that the SFI has the right to liquidate or take legal possession of the collateral, in a timely manner, in the event of default, insolvency or bankruptcy (or one or more otherwise defined credit events set forth in the transaction documentation) of the counterparty (where applicable, of the custodian holding the collateral).
- 50. Furthermore, SFIs must take all steps necessary to fulfill those requirements under the law for obtaining and maintaining an enforceable security interest. For example, by registering it with a registrar, or by exercising a right to net or set off in relation to title transfer collateral arrangements. This includes clear and robust procedures for the immediate liquidation of collateral to ensure that any legal conditions required for declaring the default of the counterparty and liquidating the collateral is observed, and that the collateral can be liquidated promptly.
- 51. In order for collateral to provide protection, the credit quality of the counterparty and the value of the collateral must not have a material positive correlation. If so, the collateral will not be eligible for recognition under this framework. For example, securities issued by the counterparty or by any related group entity would provide little protection and would therefore be ineligible.
- 52. Where a custodian holds the collateral, SFIs must take reasonable steps to ensure that the custodian segregates the collateral from its own assets.
- 53. Under the simple method for credit risk mitigation, collateral may be recognised for credit risk mitigation purposes only if the collateral is pledged for at least the life of the exposure, and is marked to market with a minimum frequency of six months. For example, liquid treasury

securities should be valued daily, while real estate exposures should be valued at least annually. The release of the collateral must be conditional on the repayment of the exposure.

Risk weighting of collateralised transaction under the Simple Method

- 54. Those portions of claims collateralised by the market value of recognised collateral receive the risk weight applicable to the collateral instrument. The risk weight on the collateralised portion will be subject to a floor of 20%, except under the conditions specified below.
- 55. Where a transaction is collateralised, a 0% risk weight may be applied only where the exposure and the collateral are denominated in the same currency, and the collateral is cash on deposit and is pledged for the duration of the exposure.

Operational requirements for Guarantees

- 56. Only guarantees listed in Regulation 17: Eligible collateral and guarantees of the Capital Regulations will be recognised under this framework. Therefore, only guarantees issued by or protection provided by entities with a lower risk weight than the counterparty will lead to reduced capital charges. Under the substitution approach, the portion of the exposure covered by an eligible guarantee may be assigned the risk weight of the protection provider. The uncovered portion of the exposure must be assigned the risk weight of the applicable underlying counterparty.
- 57. In addition to the general requirements above, in order for a guarantee to be recognised, the following conditions must be satisfied:
 - (a) the guarantee must represent a direct claim on the protection provider and must be explicitly referenced in relation to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and incontrovertible;
 - (b) the guarantee must be irrevocable. There must be no clause in the contract that would allow the protection provider unilaterally to cancel the credit cover or that would increase the effective cost of cover as a result of deteriorating credit quality in the hedged exposure;.
 - (c) the guarantee must be unconditional. That is, there should be no clause in the protection contract outside the direct control of the SFI that could prevent the protection provider from being obligated to pay out in a timely manner in the event that the original counterparty fails to make the payment(s) due; and
 - (d) on the qualifying default of, non-payment of the counterparty, the SFI may in a timely manner pursue the guarantor for any monies outstanding under the documentation governing the transaction. The SFI must have the right to receive payment from the guarantor without the need for legal action to be taken. The guarantor may make one lump sum payment of all monies under such documentation to the SFI, or the guarantor may assume the future payment obligations of the counterparty covered by the guarantee.

Risk weight treatment for Guarantees/Credit Protection

- 58. The general risk-weight treatment for transactions in which eligible credit protection is provided is as follows:
 - (a) The protected portion is assigned the risk weight of the protection provider. The uncovered portion of the exposure is assigned the risk weight of the underlying counterparty.
 - (b) Materiality thresholds on payments below which no payment is made in the event of a loss are equivalent to retained first loss positions and must be deducted in full from the capital of the SFI purchasing the credit protection.

On-Balance Sheet Netting

- 59. A SFI may use the net exposure of loans and deposits for the purposes of its capital adequacy calculation. On-balance sheet netting is recognised only when conditions outlined in the Capital Regulations have been met.
- 60. Off-balance sheet netting will not be permitted, unless there is a legally enforceable master netting agreement in place with the counterparty, in each relevant jurisdiction in the event of insolvency, bankruptcy or other similar circumstances of the counterparty. In such cases, each transaction will be subject to a capital charge as if there were no master netting agreement.
- 61. Contracts containing walkaway clauses will not be eligible for netting for purposes of calculating capital charges.
- 62. Where the Central Bank is not satisfied with the enforceability under the relevant laws, the netting contract or agreement will not be recognised for capital adequacy purposes.

Lombard Secured Lending

- 63. Every SFI must have in place robust, board-approved risk management policies around its secured lending program. For SFIs engaged in Lombard lending, the following general principles will apply:
 - (a) the value and quality of the related collateral must be closely monitored for Lombard loans;
 - (b) credit commitments must be secured by a pledged/enforceable agreement over the assets used as collateral for all claims that may arise from the foreseeable relationship between the parties. Any changes made (i.e. maintenance/extensions) shall be made on the same terms and conditions of the pledge agreement, unless a new agreement is established;

- (c) in addition to the general requirements for legal certainty, the pledged agreement must give the lender the right to liquidate the collateral in a timely manner in the event of an unacceptable collateral ratios or an anticipated default;
- (d) eligible collateral must be marked-to-market with a minimum frequency appropriate to the nature of the asset (for example, marketable securities must be priced at least daily to enable the lender to calculate the aggregate market value of the collateral);
- (e) large exposures in the collateral must be monitored regularly;
- (f) the SFI must have a formal approval process in place at credit origination, to ensure that the underlying collateral is appropriately evaluated and the relevant documentation governing the transaction is in place; and
- (g) the SFI must also have a formal structure in place to monitor collateral values and credit limit violations. The SFI must be able to identify deficiencies in the collateral position and take corrective action where the collateral drops in value (including liquidation of the collateral).

Risk Weight Treatment for Lombard Portfolios

- 64. When lending against a portfolio of securities, SFIs may apply the weighted average of the risk weights associated with the underlying collateral, subject to the following conditions:
 - (a) The risk weight on the underlying exposure or collateral, will receive either:
 - 20%; or
 - the risk weights that would apply had the SFI lent separately to the borrower against each security as a separate collateral.
 - (b) When calculating the weighted average risk weight, the SFI may use either the weighted average of the risk weights associated with the aggregate collateral provided, or may calculate the weighted average risk weight on the highest quality collateral, to the extent of 120% of the maximum exposure amount.
 - (c) Securities issued by the borrower or an affiliate of the borrower must not be included in the collateral risk weight calculation.
 - (d) Debt securities with ratings from qualifying rating agencies may be included in the collateral risk weight calculation at the risk weights outlined in the Fourth Schedule of the Capital Regulations.
 - (e) Equities listed on a recognised stock exchange may be included in the collateral pool, at a risk weighting of 100%. Upon application, a lower risk weight may apply, subject to the Central Bank's satisfaction with the SFI's collateralised lending arrangements.

11. EXTERNAL CREDIT ASSESSMENT INSTITUTIONS ("ECAIs")

- 65. Under the Standardised Approach, SFIs are able to rely on the credit assessments prepared by ECAIs. For such ratings to be used for capital adequacy purposes, the ECAI must first be recognised as eligible by the Central Bank. Where necessary, an appropriate mapping of the ratings of individual ECAI ratings will also be determined by the Central Bank.
- 66. SFIs must use the chosen ECAIs and their ratings consistently for each type of claim, for both risk weighting and risk management purposes. SFIs will not be allowed to "cherry-pick" the assessments provided by different ECAIs and to arbitrarily change the use of ECAIs.

The Recognition Process

67. The Central Bank will determine on a continuous basis whether an ECAI meets the criteria provided below. The IOSCO Code of Conduct Fundamentals for Credit Rating Agencies will also be referenced when determining an ECAI eligibility. The assessments of ECAIs may be recognised on a limited basis, e.g. by type of claims or by jurisdiction. The supervisory process for recognising ECAIs will be made public to avoid unnecessary barriers to entry.

Eligibility Criteria

68. An ECAI must satisfy each of the following six criteria:

Objectivity: The methodology for assigning credit assessments must be rigorous, systematic, and subject to some form of validation based on historical experience. Moreover, assessments must be subject to ongoing review and responsive to changes in financial condition. Before recognising an assessment methodology for any market segment, the Central Bank must be satisfied that at a minimum, rigorous back testing was conducted, covering a period of at least one year but preferably three years.

Independence: An ECAI should be independent and should not be subject to political or economic pressures that may influence the rating. The assessment process should be as free as possible from any constraints that could arise in situations where the composition of the board of directors or the shareholder structure of the assessment institution may be seen as creating a conflict of interest.

International Access/Transparency: Individual assessments must be available to both domestic and foreign institutions with legitimate interests and on equivalent terms. The individual assessments, the key elements underlining the assessments and whether the issuer participated in the assessment process should be publicly available on a non-selective basis, unless they are private assessments. In addition, the general procedures, methodologies and assumptions for arriving at the assessments used by the ECAI should be publicly available.

Disclosure: An ECAI should disclose the following information: its code of conduct; the general nature of its compensation arrangements with assessed entities; its assessment methodologies, including the definition of default, the time horizon, and the meaning of each rating; the actual default rates experienced in each assessment category; and the transitions of the assessments, e.g. the likelihood of AA ratings becoming A rating over time.

Resources: An ECAI should have sufficient resources to carry out high quality credit assessments. These resources should allow for substantial ongoing contact with senior and operational levels within the entities assessed in order to add value to the credit assessments.

Credibility: In addition to fulfillment of the above criteria, the extent to which an ECAI's credit assessments are relied upon by independent third parties (investors, insurers, trading partners) is reviewed in judging its credibility. Additionally, credibility is underpinned by the effectiveness of internal procedures aimed at preventing the misuse of confidential information. To be eligible for recognition, an ECAI does not have to assess firms in more than one country.

The Mapping Process

- 69. The Central Bank will assign eligible ECAIs' assessments to the risk weights available under the risk weighting framework outlined in this document, i.e. deciding which assessment categories correspond to which risk weights. The mapping process would be objective and result in a risk weight assignment consistent with that of the level of credit risk reflected in the relevant tables (for the respective risk weight category). It would cover the full spectrum of risk weights.
- 70. In conducting the mapping process, the Central Bank will consider factors such as:
 - (a) the size and scope of the pool of issuers that each ECAI covers;
 - (b) the range and meaning of the assessments that it assigns; and
 - (c) the definition of default used by the ECAI.
- 71. SFIs must disclose ECAIs that they use for the risk weighting of their assets by type of claims, the risk weights associated with the particular rating grades as determined by the supervisor through the mapping process as well as the aggregated risk-weighted assets for each risk weight based on the assessments of each eligible ECAI.

Multiple Assessments

- 72. If there is only one assessment by an ECAI, chosen by a SFI for a particular claim, that assessment should be used to determine the risk weight of the claim.
- 73. If there are two assessments by an ECAIs chosen by a SFI, which map into different risk weights, the higher risk weight will be applied.
- 74. If there are three or more assessments with different risk weights, the assessments corresponding to the two lowest risk weights should be referred to and the higher of those two risk weights will be applied.

Issuer versus Issue Assessment

75. Where a SFI invests in a particular issue that has an issue-specific assessment, the risk weight of the claim will be based on this assessment. Where the claim is an investment in an issue that has not been specifically assessed, the SFI can rely on a specific credit assessment of an issued debt or on a credit assessment of the issuer. The following general principles will apply:

- (a) credit assessment of a specific debt: In circumstances where the borrower has a high quality credit assessment (with a risk weight lower than that which applies to an unrated claim) on a specific debt, and the unassessed claim ranks *pari passu* or senior to claims with the high quality assessment in all respects, then the high quality assessment can also be applied to the unassessed claim. If not, then the high quality credit assessment cannot be used and unassessed claims will receive the risk weight for unrated claims.
- (b) credit assessment of the issuer: In circumstances where the borrower has a high quality credit assessment, which applies to senior unsecured claims on that issuer; then other unassessed claims of a highly assessed issuer will be treated as unrated. However, if either that issuer or a single issue has a low quality assessment (with a risk weight equal to or higher than that which applies to unrated claims), then an unassessed claim on the same issuer will be assigned the same risk weight as is applicable to the low quality assessment.
- (c) other unassessed claims of a highly assessed issuer will be treated as unrated.
- 76. Whether SFIs intend to rely on an issuer or an issue-specific assessment, the assessment must take into account and reflect the entire amount of credit risk exposure (principal and interest where applicable) that SFIs have with regard to all payments owed to them.
- 77. In order to avoid any double counting of credit enhancement factors, no supervisory recognition of credit risk mitigation techniques will be taken into account if the credit enhancement is already reflected in the issue specific rating.

Domestic currency and foreign currency assessments

- 78. Where unrated exposures are risk-weighted based on the rating of an equivalent exposure to that borrower, the general rule is that:
 - (a) foreign currency ratings would be used for exposures in foreign currency; and
 - (b) domestic currency ratings, if separate, would only be used to risk weight claims denominated in the domestic currency.

Level of Application of the Assessment

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

Unsolicited Ratings

80. SFIs should only use solicited ratings from eligible ECAIs. However, there may be potential for ECAIs to use unsolicited ratings to put pressure on entities to obtain solicited ratings. Where such behaviour is identified, the Central Bank will consider whether to continue recognising such ECAIs as eligible for capital adequacy purposes.

Recognised ECAIs

- 81. The following ECAIs will be recognised for capital adequacy purposes:
 - Moody's Investors Service ("Moody's");
 - Standard and Poor's ("S&P");
 - Fitch Ratings; and
 - Caribbean Information and Credit Rating Services Limited ("CariCRIS").
- 82. The list of eligible ECAIs will be updated subject to applicants satisfying the eligibility criteria outlined in Paragraph 68 above.
- 83. The mapping of short-term and long-term ratings of the respective ECAIs are set out in the Capital Regulations.

Short Term / Long Terms Assessments

- 84. For risk weighting purposes, all short-term assessments are deemed to be issue-specific. They can only be used to derive risk weights for claims arising from the rated facility. They cannot be generalised to other short-term claims, except under the following conditions:
 - (a) the general preferential treatment for short-term claims (i.e. maturity less than three months) applies to all claims on banks of up to three month's original maturity when there is no specific short-term claim assessment.
 - (b) when there is a short-term assessment and such an assessment maps into the risk weight that is more favorable (i.e. lower) or identical to that derived from the general preferential treatment, the short-term assessment should be used for the specific claim only. Other short-term claims would benefit from the general preferential treatment.
 - (c) when a specific short-term assessment for a short term claim on a bank maps into a less favorable (i.e. higher) risk weight, the general short-term preferential treatment for interbank claims cannot be used. All unrated short- term claims should receive the same risk weighting as that implied by the specific short-term assessment.
- 85. In no event can a short-term rating be used to support a risk weight for an unrated long-term claim. Short-term assessments may only be used for short-term claims against banks and corporates.
- 86. If a short-term rated facility attracts a 50% risk weight, unrated short-term claims cannot attract a risk weight lower than 100%. If an issuer has a short-term facility with an assessment that warrants a risk weight of 150%, all unrated claims, whether long-term or short-term, should also receive a 150% risk weight, unless the SFI uses a recognised credit risk mitigation techniques for such claims.
- 87. When a short-term assessment is to be used, the institution making the assessment needs to meet all of the eligibility criteria for recognising ECAIs.

88. The table below provides a framework for SFIs' exposures to specific short-term facilities, such as a particular issuance of commercial paper:

Short Term Ratings				
S&P / Moody's	Fitch	Risk Weight		
A-I /P-I	F1	20%		
A2/P-2	F2	50%		
A3/P3	F3	100%		
Othe	150%			

12. OPERATIONAL RISK: Calculation under the Standardised Approach

- 89. Operational risk is defined as risk arising from inadequate or failed internal processes, people and systems or from external events. This definition also includes legal risk², but excludes strategic and reputational risks.
- 90. SFIs must have in place an operational risk management system with clear responsibilities assigned to an operational risk management function. The operational risk management function is responsible for developing strategies to identify, assess, monitor and mitigate operational risk. Expectations with respect to the management of operational risk are set out in the *Guidelines for the Management of Operational Risk*.
- 91. The Central Bank has determined that all SFIs must apply the standardised approach for measuring the minimum capital requirements for operational risk. This new methodology will replace all existing approaches under the Basel II framework.³
- 92. Under the Basel III framework, the new standardised approach for operational risk determines a SFI's operational risk capital requirements based on two components: (i) a measure of a SFI's income; and (ii) a measure of a SFI's historical losses. Conceptually, it assumes that (i) operational risk increases at an increasing rate with a SFI's income; and (ii) that SFIs which have experienced greater operational risk losses historically are assumed to be more likely to experience operational risk losses in the future.
- 93. The methodology is based on the following components: (i) the Business Indicator (BI) which is a financial-statement-based proxy for operational risk; (ii) the Business Indicator Component (BIC), which is calculated by multiplying the BI by a set of regulatory determined marginal coefficients $(\alpha_i)^4$; and (iii) the Internal Loss Multiplier (ILM), which is a scaling factor that is based on a SFI's average historical losses and the BIC.
- 94. The BI comprises three components: the interest, leases and dividend component (ILDC); the services component (SC) and the financial component (FC). To calculate the BIC, the BI is

² Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions as well as private settlements.

³ That is, this standard replaces paragraphs 644 to 683 of the Basel II framework.

⁴ BI marginal coefficient is 12% in bucket 1(\leq \$bn), 15% in bucket 2 (\$1 bn < BI \leq \$30 bn) and 18% in bucket 3 (>\$30 bn).

multiplied by the marginal coefficients (α_i). The operational risk capital requirement is determined by the product of the BIC and the ILM.

- 95. Using national discretion, SFIs' operational risk capital requirement will be based solely on the measure of the SFI's income or business indicator (BI), calculated as the average over three years (i.e. using a financial statement based figure as a proxy for operational risk).
- 96. The Central Bank will apply the BI marginal coefficient of 12% to all SFIs, and the ILM will be equal to 1.

The formula for the calculation is:

Operational Risk Capital Charge = SFI's Total Gross Income $\times 12\%$

97. As an illustrative example:

Where a SFI has total income of \$5 million, the operational risk capital charge would be calculated as:

BI Bucket 1:\$5 million x 12% = \$0.6 million

Operational risk Capital Charge = \$0.6 million (BIC) x 1 (ILM) **Operational Risk Equivalent Assets** = \$0.6 million x 12.5 = \$7.5 million

- 98. For the purposes of the above calculation, the SFI's gross income is calculated on the same basis as for the SFI's financial accounts. SFIs must use the most recent published financial statement based on their fiscal year end, rather than the calendar year end. The Central Bank will reserve the right to apply a different calculation for SFIs with unusual or negative gross income profiles.
- 99. All SFIs are required to disclose to the Central Bank any operational risk loss event that exceeds \$100,000. Information reported should be commensurate with the size of the operational loss event. The minimum loss data information to be reported include the following:
 - (a) Total Gross loss amount(s)⁵;
 - (b) The business activities/lines affected;
 - (c) Date of occurrence i.e. reference dates of the operational risk event (including the date when the event happened or first began);
 - (d) Date of discovery the date on which the SFI became aware of the event;
 - (e) Date of accounting the date (or dates) when the loss event resulted in a loss, reserve or provision against a loss being recognised in the SFI's profit and loss (P&L) accounts; and

⁵ Gross loss is a loss before recoveries of any type.

(f) Information on recoveries of gross loss amounts as well as information about the drivers or causes of the loss event (if available).

13. MARKET RISK: Calculation under the Simplified Standardised Approach

- 100. Market risk is defined as the risk associated with a SFI's on and off-balance sheet exposures arising from changes in financial market prices. The risks subject to market risk capital requirement include but are not limited to:
 - (a) interest rate risk, equity risk, credit spread risk, foreign exchange risk and commodities risk in the trading book; and
 - (b) foreign exchange risk and commodities risk in the banking book (i.e. throughout the SFI).
- 101. The market risk associated with individual financial instruments and portfolios of instruments can be very complex and SFIs are required to adequately measure, monitor and control the risks involved in their trading activities. Guidance with respect to the management of market risk is set out in the *Guidelines on the Management of Market Risk*.

The Trading Book and Banking Book

- 102. Every SFI shall establish an internal boundary between its banking book and its trading book. Exposure to market risk may arise as a result of the SFI taking deliberate speculative positions or may come from the SFI's market making activities. A SFI which has significant trading activity will be required to hold capital commensurate with the level of market risk in its trading book. Conversely, a SFI with an insignificant trading book should have processes in place to ensure adequacy of capital against such risks (e.g. interest rate risk or foreign exchange risk). Such exposures will be excluded from the market risk measure and only subject to credit risk capital charges.
- 103. The banking book refers to all market risk positions not assigned to the trading book. Financial instruments in the banking book are not actively traded by the SFI but are meant to be held on the books of the SFI until maturity.
- 104. The trading book consists of positions in financial instruments and commodities held either with trading intent or in order to hedge other elements of the trading book. To be eligible for trading book capital treatment, financial instruments must either be free of any restrictive covenants on their tradability or able to be hedged completely. In addition, positions should be frequently and accurately valued, and the portfolio should be actively managed.
- 105. Financial instruments presumed to be in the trading book, include but are not limited to the following:
 - (a) Instruments designated as 'held for trading' under the relevant international accounting standards (i.e. financial asset or liability);
 - (b) Instruments resulting from market-making activities;
 - (c) Instruments resulting from underwriting activities;
 - (d) Any listed equity or equity investment in a fund;

- (e) Naked short positions, including all short positions in cash instruments;
- (f) Options; or
- (g) Any other instruments managed on a trading desk.
- 106. Instruments that do not meet the definition of the trading book, should be assigned to the banking book. Additionally, instruments not meeting the definition of the trading book owing to significant constraints in the SFI's ability to liquidate such instruments and value them on a daily basis, should remain in the banking book. For example:
 - (a) any unlisted equity;
 - (b) real estate holdings;
 - (c) equity investment in mutual funds (including hedge funds) where the SFI cannot look through the fund daily or readily obtain real prices for its equity investment in the fund; or
 - (d) derivative instruments with the previous instrument type as underlying assets.
- 107. The Capital Regulations provide that the Central Bank may re-designate a financial instrument from the trading book to the banking book or vice versa, if, in the opinion of the Central Bank, the asset is deemed to be improperly designated.
- 108. All instruments in the trading book must be fair valued daily throughout the profit and loss statement.

Eligibility

109. All public banks and bank and trust companies incorporated in The Bahamas, that have a trading book that meets the *de minimis threshold* as prescribed in the Capital Regulations are subject to a market risk capital charge.

Measuring Market Risk – Simplified Standardised Approach

- 110. SFIs subject to capital requirements for market risk will be expected to monitor and report the level of risk against which a capital requirement is to be applied. In measuring their market risk, SFIs must calculate the market risk capital requirement using the *simplified alternative* to the standardised approach. Assets subject to market risk capital requirements are excluded from the credit risk capital requirements.
- 111. This method provides a set of pre-defined rules for determining market risk exposure arising from five main risk classes, namely:
 - (a) interest rate risk;
 - (b) equity risk;
 - (c) foreign exchange (FX) risk;
 - (d) commodity risk; and
 - (e) options (where applicable).

Market Risk Capital Requirement

- 112. The minimum capital requirement for market risk is expressed in terms of:
 - (a) general market risk; and
 - (b) specific risk (that is, the risk associated with exposures to specific issuers of debt securities or equities).
- 113. In assessing these risks, SFIs will be required to make general and/or specific risk calculations for each class of instruments. Positions in interest rate risk, equity risk, foreign exchange risk and commodities all give rise to general market risk. For interest rate and equity positions, an additional capital charge for specific risk should be applied.

Risk-weighted assets

- 114. Risk-weighted assets for market risk will be calculated by multiplying the capital requirements for interest rate risk, equity risk, FX risk and commodities risk by the multiplication factor of 12.5.
- 115. The capital requirement arising from the simplified standardised approach is calculated as the simple sum of the recalibrated capital requirements arising from the four risk classes, as detailed in the formula below:
 - (a) CR*IRR* = capital requirement calculated for interest rate risk, plus additional requirements for option risks from debt instruments (non-delta risks)
 - (b) CREQ = capital requirement calculated for equity risk, plus additional requirements for option risks from equity instruments (non-delta risks)
 - (c) CRFX = capital requirements calculated for foreign exchange risk, plus additional requirements for option risks from foreign exchange instruments (non-delta risks)
 - (d) CRCOMM = capital requirements calculated for commodities risk, plus additional requirements for options risk from commodities instruments (non-delta risks)
 - (e) SFIRR = Scaling factor of 1.30;
 - (f) SFEQ = Scaling factor of 3.50;
 - (g) SFFX = Scaling factor of 1.20; and
 - (h) SFCOMM = Scaling factor of 1.90

Capital Requirement = CR/RR *SF/RR + CREQ *SFEQ + CRFX *SFFX + CRCOMM *SFCOMM

- 116. The recalibrated capital requirements comprise the use of specified **scalars** to ensure a sufficient conservative method for calculating capital requirements for relatively small or non-complex trading portfolios.
- 117. The scaling factors are then multiplied by the capital requirements arising from each of the four risk classes, then aggregated to arrive at the total capital charge for market risk.

Interest Rate Risk

118. The holding or taking of positions in debt securities and other interest rate related instruments in the trading book give rise to interest rate risk, i.e. the risk that a SFI will face adverse changes in its earnings and/or economic value of equity resulting from changes in the absolute level of interest rates, in the spread between the two rates, or in the shape of the yield curve, or in any other interest rate relationship.

Interest rate related instruments covered include:

- (a) all fixed-rate and floating-rate debt securities and instruments that behave like them, including non-convertible preference shares;
- (b) convertible bonds, i.e. debt issues or preference shares that are convertible, at a stated price, into common shares of the issuer;
- (c) all interest rate derivatives and off-balance sheet exposures, which react to changes in interest rates (e.g. forward contracts, bond futures, forward foreign exchange positions, interest rate and cross-currency swaps).
- 119. The minimum capital requirement for interest rate risk is expressed in terms of two separately calculated charges:
 - (a) "specific risk" of each security, whether it is a short or a long position;
 - (b) "general market risk" relates to the other interest rate risk in the portfolio where long and short positions in different securities or instruments can be offset.

Specific Risk

- 120. The specific risk capital charge is designed to protect against an adverse movement in the price of an individual security owing to factors related to the individual issuer. It is calculated by multiplying the market value of the debt position in the trading book by the specific risk charge.
- 121. The specific capital requirements for "government" and "other" categories are set out in Form 13 of the *Guidance Notes for the Completion of Market Risk Reporting Forms*.
- 122. In measuring interest rate risk, offsetting will be restricted to matched positions in the identical issue (including positions in derivatives). Even where the issuer is the same, no offsetting will be allowed between different issues.
- 123. The government category will include all forms of government paper (e.g. bonds, treasury bills, and other short term instruments). The Government of The Bahamas issued debt, denominated and funded by a SFI in Bahamian dollars will attract a specific risk capital charge of 0%.
- 124. A specific risk charge will apply to derivative contracts in the trading book only when they are based on an underlying instrument. The specific risk charge for derivative contracts is calculated by multiplying the market value of the effective notional amount of the debt instruments that underlies an interest rate swap, future or forward by the specific risk factors that correspond to the category and residual term of the underlying debt instrument.

General Risk

- 125. The capital requirements for general market risk are designed to capture the risk of loss arising from changes in market interest rates. A choice between two principal methods of measuring the risk is permitted a *maturity method* and a *duration method*. In each method, the positions are allocated across a maturity ladder, and the capital requirement is the sum of four components:
 - (a) the net short or long position in the whole trading book;
 - (b) a small proportion of the matched positions in each time band (the "vertical disallowance");
 - (c) a larger proportion of the matched positions across different time bands (the "*horizontal disallowance*"); and
 - (d) a net charge for positions in options, where appropriate
- 126. The computation of the capital charge for interest rate risk will be calculated as per Sections III and IV (Forms 12 and 13) of the *Guidance Notes for the Completion of Market Risk Reporting Forms.*

Equity Risk

- 127. An institution which holds equity positions (whether long or short) is exposed to the risk that the value of an individual equity position relative to the market may move against the institution (i.e. specific risk) and that the equity market as a whole may move against it (i.e. general risk). Equity related risk is calculated for the specific risk of holding a security (beta) and for the position of the market as a whole.
- 128. Equity risk relates to taking or holding trading book positions in equities or in instruments that display equity-like behavior (e.g. common shares, convertible securities or equity derivatives), but not to non-convertible preference shares (which are covered by interest rate risk requirements).

Specific and General Market Risks

- 129. As with debt securities, the minimum capital standard for equities is expressed in terms of two separately calculated capital requirements for (i) the specific risk of holding a long or short position in an individual equity and (ii) the general market risk of holding a long or short position in the market as a whole. Specific risk is defined as the SFI's gross equity positions (that is, the sum of all long and all short equity positions) and general market risk is defined as the difference between the sum of the longs and the sum of the shorts (that is, the overall net position in an equity market). The long or short positions must be calculated separately for each national market in which the SFI holds equities (i.e. on a market by market basis). The equity derivatives should be converted into the notional equity position in the relevant underlying instrument.
- 130. The long and short positions in identical equity issues may be reported on a net basis. The capital charge for both the specific and general market will each be 8%.

131. The computation of the capital charge for equity risk will be calculated as per Sections V and VI (Form 14) of the *Guidance Notes for the Completion of Market Risk Reporting Forms.*

Foreign Exchange Risk

- 132. SFIs must maintain capital for foreign exchange risk against the risk that movements in currency exchange rates (including gold) may adversely affect the value of their open foreign exchange positions. Foreign exchange risk incurs general market risk. This risk may arise from foreign currency transactions and services, foreign exchange trading, investments denominated in foreign currencies and investments in foreign subsidiaries, as a result of:
 - (a) currency mismatches between a SFI's assets and liabilities;
 - (b) currency cash flow mismatches.
- 133. The capital charge for foreign exchange risk is applied to the entire business, i.e. the banking book and the trading book. Two processes are required to calculate the capital requirements for foreign currency risk:
 - (1) the first is to measure the exposure in a single currency position; and
 - (2) the **second** is to measure the risks inherent in a SFI's mix of long and short positions in different currencies.
- 134. The SFI's **net open position** in a single currency position is determined by adding together the SFI's net open position in each individual currency for:
 - the net spot position (i.e. all asset items less all liability items, including accrued interest, denominated in the relevant currency);
 - (2) the net forward position (i.e. all amounts to be received less all amounts to be paid under forward foreign currency transactions, including currency futures and the principal on currency swaps not included in the spot position);
 - (3) guarantees (and similar instruments) that are certain to be called and are likely to be irrecoverable;
 - (4) net future income/expenses (i.e. interest accrued but not yet received, as well as any accrued expenses not yet paid);
 - (5) the net delta-based equivalent of the total book of foreign currency options currently held; and
 - (6) any other item representing a profit or loss in foreign currencies (depending on particular accounting conventions in different countries).
- 135. Using the shorthand method, the overall net open position is determined by aggregating:
 - (1) the sum of the net short positions or the sum of the net long positions, whichever is greater; plus
 - (2) the net short or long positions in gold, regardless of the sign.

- 136. The capital requirement will be 8% of the higher of either the net long currency positions or net short currency positions, plus 8% of the net position in gold.
- 137. The computation of the capital charge for foreign exchange risk will be calculated as per Section VII (Form 15) of the *Guidance Notes for the Completion of Market Risk Reporting Forms.*

Commodities Risk

- 138. A commodity is defined as a physical product, which is or can be traded on a secondary market (for example, agricultural products, minerals and precious metals excluding gold). Under the simplified standardised approach, commodity risk may be measured using either (i) the maturity ladder approach or (ii) the simplified approach. All commodity derivatives and off-balance sheet positions that are affected by changes in commodity prices should be included.
- 139. Under the maturity ladder approach, each commodity position (spot plus forward) must be expressed in terms of the standard unit of measurement (e.g. barrels, kilos, grams etc.). The net position in each commodity is then converted at the current spot rates into the national or reporting currency. The capital requirement will be equal to 15% of the net open position, long or short in each commodity.
- 140. Under the simplified approach, the same procedure will be adopted as in the maturity ladder approach. The capital requirement will be equal to 15% of the net open position, long or short in each commodity. In order to protect the SFI against basis risk, interest rate risk and forward gap risk, the capital requirement for each commodity will be subject to an additional capital requirement equivalent to 3% of the SFI's gross positions (long plus short), in that particular commodity.
- 141. The computation of the capital charge for commodities risk will be calculated as per Section VIII (Form 16) of the *Guidance Notes for the Completion of Market Risk Reporting Forms.*

Treatment of Options

- 142. Option contracts and related hedging positions in associated underlying instrument, commodity or index, cash or forward are subject to capital requirements. Under the standardised approach, two alternative approaches to measuring market risk for options activities will be allowed:
 - SFIs which solely use purchased options can use the simplified approach; and
 - SFIs which write options are expected to use the scenario method unless all their option positions are hedged by perfectly matched long positions in exactly the same options, in which case no capital charge is required for market risk.

Simplified approach

143. SFIs that handle a limited range of purchased options can use the simplified approach. In the simplified approach for options, the positions for the options and the associated underlying cash or forward, are not subject to the standardised methodology but rather are carved-out and

subject to separately calculated capital requirements that incorporate both general market risk and specific risk.

144. The risk numbers generated are then added to the capital requirements for the relevant category, i.e. interest rate related instruments, equities, FX and commodities.

Scenario Method

- 145. The scenario approach uses simulation techniques to calculate changes in the value of an options portfolio for changes in the level and volatility of its associated underlyings. Under this approach, the general market risk charge is determined by the scenario grid (i.e. the specified combination of underlying and volatility changes) that produces the largest loss.
- 146. The computation of the capital charge for options will be calculated as per Sections IX to XII (Forms 17, 18A, 18B and 18C) of the *Guidance Notes for the Completion of Market Risk Reporting Forms.*

14. **REPORTING**

- 147. Under the Capital Regulations, all SFIs must provide the Central Bank with their capital adequacy calculation in the manner prescribed by the Central Bank on a quarterly basis⁶. However, the Central Bank may request more frequent information, particularly where a programme of remedial action is in place (e.g., in the case of breaches of the trigger capital ratio).
- 148. The Central Bank may require a SFI to reduce the level of credit risk, operational risk, market risk or increase capital if deemed not commensurate with the SFI's risk profile.
- 149. SFIs are required to maintain adequate capital on a continuing basis, not just on reporting dates.
- 150. Under the Capital Regulations, the Central Bank may exempt any SFI, group of SFIs or class of SFI from the provisions of the Regulations, subject to such terms and conditions as the Bank may impose.

⁶ Commercial banks are required to report on a monthly basis.