GOVERNMENT GAZETTE

OF THE

REPUBLIC OF NAMIBIA

N$58.20 WINDHOEK - 24 August 2018 No. 6687

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BANK OF NAMIBIA

No. 496 2018

DETERMINATION UNDER THE BANKING INSTITUTIONS ACT, 1998: MEASUREMENT AND CALCULATION OF CAPITAL CHARGES FOR CREDIT RISK, OPERATIONAL RISK AND MARKET RISK FOR DOMESTIC SYSTEMICALLY IMPORTANT BANKS (BID-5A)

In my capacity as Governor of the Bank of Namibia (Bank), and under the powers vested in the Bank by virtue of section 71(3) of the Banking Institutions Act, 1998 (Act No. 2 of 1998), read in conjunction with section 28 and 29 of the aforementioned Act, I hereby issue the **Determination on the Measurement and Calculation of Capital Charges for Credit Risk, Operational Risk and Market Risk for Domestic Systemically Important Banks (BID-5A)**, which Determination shall become effective on 1 September 2018.

I. W SHIIMI
GOVERNOR

Windhoek, 10 July 2018

Determination No. BID-5A

MEASUREMENT AND CALCULATION OF CAPITAL CHARGES FOR CREDIT RISK, OPERATIONAL RISK AND MARKET RISK FOR DOMESTIC SYSTEMICALLY IMPORTANT BANKS (DSIBs)

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PART I: PRELIMINARY

1. **Short Title** – Capital Adequacy

2. **Authorisation** – Authorisation for the Bank to issue this determination is provided in Section 71(3) read together with Sections 28 and 29 of the Banking Institution Act, 1998 ("Act").

3. **Application** – This determination applies to all banks and bank controlling companies classified as Domestic Systemically Important Banking institutions (DSIBs) and banking groups and authorised by the Bank to conduct banking business in Namibia.

4. **Definitions** – Terms used within this determination are as defined in the Act, as further defined in annexure 15: Glossary of terms or as reasonably implied by contextual usage:

PART II: STATEMENT OF POLICY

5. **Purpose** – This determination is intended to ensure that: (a) banking institutions maintain a level of capital which is adequate to protect its depositors and creditors; (b) the banking sector improves its ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spill-over from the financial sector to the real economy; (c) capital is commensurate with the risk activities and profile of the banking institution and banking group; and (d) it promotes public confidence in the banking institution and the banking system.

6. **Scope** – This determination applies to all banking institutions and bank controlling companies classified as Domestic Systemically Important Banking institutions (DSIBs) and banking group authorised in Namibia.

7. **Responsibility** – The board of directors of each banking institution and banking group shall be responsible for establishing and maintaining at all times an adequate level of capital. The board of directors shall also be responsible for establishing effective risk management process that identify and measure, monitor and control all types of risk that threatens the capital of the banking institution. The capital levels required herein are the minimum acceptable for banking institutions that are fundamentally sound, well managed, and have no material financial or operational weaknesses.

PART III: IMPLEMENTATION AND SPECIFIC REQUIREMENTS

8. Introduction

a) The Basel III reforms are the response of the Basel Committee on Banking Supervision (BCBS) to enhance the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, thus reducing the risk of spill over from the financial sector to the real economy.

b) Basel III reforms strengthen the bank-level i.e. micro prudential regulation, with the intention to raise the resilience of individual banking institutions in periods of stress. Furthermore, the reforms have a macro prudential focus, addressing system wide risks which can build up across the banking sector, as well as the procyclical amplification of these risks over time. These new global regulatory and supervisory standards mainly seek to raise the quality and level of capital to ensure banking institutions are better able to absorb losses on both a going concern and a gone concern basis, increase the risk coverage of the capital framework, introduce a leverage ratio to serve as a backstop to the risk-based capital measure, raise the standards for the supervisory review process (Pillar 2) and public disclosures (Pillar 3), amongst others. The macro prudential aspects of Basel III are largely enshrined in the capital buffers. Both the buffers (capital conservation buffer and the countercyclical buffer) are intended to protect the banking sector from periods of excess credit growth.

8.1. Approach to Implementation and Effective Date

a) The Basel III capital regulations continue to be based on three mutually reinforcing Pillars, namely, minimum capital requirements, supervisory review of capital adequacy and market discipline of the Basel II capital adequacy framework. All commercial banking institutions in Namibia must continue using the Standardized

Approach for credit risk, Standardized Approach for operational risk since January 2010 and the Standardized Duration Approach (SDA) for computing capital requirement for market risks.

b) The Basel III capital Determination is being implemented in Namibia with effect from 1 September 2018. Banking institutions have to comply with the regulatory limits and minima as prescribed under Basel III capital regulations, on an ongoing basis. To ensure smooth transition to Basel III, appropriate transitional arrangements have been provided for meeting the minimum Basel III capital ratios and full regulatory adjustments to the components of capital etc. Consequently, Basel III capital regulations would be fully implemented as on 1 September 2018. In view of the gradual phase-in of regulatory adjustments to the Common Equity component of Tier 1 capital under Basel III, certain specific prescriptions of Basel II capital adequacy framework (e.g. rules relating to deductions from regulatory capital, risk weighting of investments in other financial entities, etc.) will also continue to apply untill 1 September 2022 on the remainder of regulatory adjustments not treated in terms of Basel III rules.

8.2. Scope of Application of Capital Adequacy Framework

The Determination shall apply on two levels:

a) The consolidated ("group") level[1] capital adequacy ratio requirements, which measure the capital adequacy of a controlling company based on its capital strength and risk profile after consolidating the assets and liabilities of its subsidiaries / joint ventures / associates etc., both local and foreign, except those engaged in insurance and any non-financial activities; and

b) The standalone ("solo") level capital adequacy ratio requirements, which measure the capital adequacy of a banking institution based on its standalone capital strength, i.e. bank and its subsidiaries / joint ventures / associates, both local and foreign.

8.3. Composition of Total Capital

a) Banking institutions are required to maintain a minimum Pillar 1 Capital to Risk-weighted Assets Ratio (CRAR) of 10% on an on-going basis (other than capital conservation buffer and countercyclical capital buffer). The Bank will take into account the relevant risk factors and the internal capital adequacy assessments of each banking institution to ensure that the capital held by the banking institution is commensurate with the banking institution's overall risk profile. This would include, among others, the effectiveness of the banking institution's risk management systems in identifying, assessing / measuring, monitoring and managing various risks including interest rate risk and residual risk. Accordingly, the Bank may consider requiring a higher level of minimum capital ratio for each banking institution under the Pillar 2 framework on the basis of their respective risk profiles and their risk management systems. Further, in terms of Pillar 2 requirements, banking institutions are

[1]In terms of the provisions of the Determination on Consolidated Supervision BID-24.

expected to operate at a level well above the minimum requirement. A banking institution should compute Basel III capital ratios in the following manner:

Common Equity Tier 1 Capital Ratio	=	Common Equity Tier 1 Capital / Credit Risk RWA*+ Market Risk RWA + Operational Risk RWA
Tier 1 Capital Ratio	=	Eligible Tier 1 Capital / Credit Risk RWA*+ Market Risk RWA + Operational Risk RWA
Total Capital (CRAR#)	=	Total Qualifying Capital / Credit Risk RWA*+ Market Risk RWA + Operational Risk RWA

9. Constituents, requirements and components of capital

9.1. Constituents of Capital

Total capital will consist of the sum of the following elements:

a) Tier 1 Capital (going-concern capital), which comprises:

i) Common Equity Tier 1 Capital, and

ii) Additional Tier 1 Capital

and,

b) Tier 2 Capital (gone-concern capital)

For each of the constituents above there is a single set of criteria that instruments are required to meet before inclusion in the relevant category.

9.2. Capital Requirements

The capital limits below are exclusive of any capital buffers. For the purpose of calculating the minimum capital funds to be maintained pursuant to the provisions of section 28 of the Act, a banking institution's or controlling company's:

a) Common equity Tier 1 (CET1) ratio must be at least 6.0% of risk-weighted assets at all times from 1 September 2018.

b) Tier 1 capital adequacy ratio must be at least 7.5% of risk-weighted assets at all times from 1 September 2018.

c) Tier 2 capital adequacy ratio must amount up to 2.5% of risk-weighted assets but must not exceed 25% of Total Capital (one third (1/3) of Tier 1 Capital) at all times from 1 September 2018.

d) Total capital adequacy ratio (Tier 1 Capital plus Tier 2 Capital) must be at least 10.0% of risk-weighted assets at all times from 1 September 2018.

Total Capital Funds to be maintained by banking institutions must be net of associated regulatory adjustments listed under paragraph 13 of this Determination.

10. Tier 1 Capital (Detailed components of capital)

10.1. Common Equity Tier 1 Capital consists of the sum of the following elements:

a) Ordinary shares (paid-up equity capital) issued by the banking institution that meet the criteria for classification as ordinary shares for regulatory purposes;

b) Share premium resulting from the issue of ordinary shares included in CET 1;

c) Retained earnings after deducting any interim loss or final dividends which have been declared by the board of the banking institution on any class of share;

d) Accumulated other comprehensive income and other disclosed reserves[2], excluding revaluation surpluses on land and building assets;

e) The current year's interim profits may be included provided they have been reviewed by the banking institution's external auditors. In the absence of such review, current year's interim profits will not be included in the Tier 1 capital. The review by external auditors should entail at least the following:

(i) satisfying themselves that the figures forming the basis of the interim profits have been properly extracted from the underlying accounting records;

(ii) reviewing the accounting policies used in calculating the interim profits so as to obtain comfort that they are consistent with those normally adopted by the banking institution in drawing up its annual financial statements;

(iii) performing analytical procedures on the result to date, including comparisons of actual performance to date with budget and with the results of prior period(s);

(iv) discussing with management the overall performance and financial position of the banking institution;

(v) obtaining adequate comfort that the implications of current and prospective litigation, all known claims and commitments, changes in business activities and provisioning for bad and doubtful debts have been properly taken into account in arriving at the interim profits;

[2] There is no adjustment applied to remove from Common Equity Tier 1 capital unrealised gains or losses recognised on the balance sheet. Unrealised losses are subject to transitional arrangements. The BCBS will continue to review the appropriate treatment of unrealised gains, taking into account the evolution of the accounting framework.

(vi) following up on problem areas of which the auditors are already aware in the course of auditing the banking institution's financial statements; and

(vii) the external auditors must submit their conclusion to the Bank on whether the interim results are fairly stated, and whether the provisions for bad and doubtful debts are adequate.

f) Ordinary shares issued by consolidated subsidiaries of the banking institution and held by third parties (i.e. minority interest) that meet the criteria for inclusion in Common Equity Tier 1 capital; and

g) Regulatory adjustments applied in the calculation of Common Equity Tier 1.

10.2. Criteria for classification as Ordinary shares for regulatory capital purposes[3]

For an instrument to be included in Common Equity Tier 1 capital it must meet all of the criteria that are listed below. In the rare cases where banking institutions need to issue non-voting ordinary shares as part of Common Equity Tier 1, they must be identical to voting ordinary shares of the issuing banking institution in all respects except for the absence of voting rights.

a) It represents the most subordinated claim in liquidation of the banking institution.

b) The holder of the instrument is entitled to a claim on the residual assets that is proportional with its share of issued capital, after all senior and subordinated debt claims have been repaid in liquidation (i.e. there is an unlimited and variable claim, not a fixed or capped claim).

c) The principal amount of the instrument is perpetual and never repaid outside of liquidation excluding discretionary repurchases or other means of effectively reducing capital in a discretionary manner that is allowable under relevant law.

d) The banking institution does nothing to create an expectation at issuance that the instrument will be bought back, redeemed or cancelled nor do the statutory or contractual terms provide any feature which might give rise to such an expectation.

e) Distributions are paid out of distributable items (retained earnings included). The level of distributions is not in any way tied or linked to the amount paid in at issuance and is not subject to a contractual cap (except to the extent that a banking institution is unable to pay distributions that exceed the level of distributable items).

[3] The criteria also apply to non-joint stock companies, such as mutual, cooperatives, or savings institutions, takin g into account their specific constitution and legal structure. The application of the criteria should preserve the quality of the instruments by requiring that they are deemed fully equivalent to common shares in terms of their capital quality as regards loss absorption and do not possess features which could cause the condition of the bank to be weakened as a going concern during periods of market stress.

f) There are no circumstances under which the distributions are obligatory. Non-payment is therefore not an event of default.

g) Distributions are paid only after all legal and contractual obligations have been met and payments on more senior capital instruments have been made. This means that there are no preferential distributions, including in respect of other elements classified as the Common Equity Tier 1 capital.

h) Only the issued capital that takes the first and proportionately greatest share of any losses as they occur must be included[4]. Within Common Equity Tier 1 Capital, each instrument absorbs losses on a going concern basis proportionately and *pari passu* (ranking equal) with all the others.

i) The paid in amount is recognised as equity capital (i.e. not recognised as a liability) for determining balance sheet insolvency;

j) The paid in amount is classified as equity under the relevant accounting standards.

k) The instrument is directly issued and paid-in and the banking institution cannot directly or indirectly have funded the purchase of the instrument.

l) The paid in amount is neither secured nor covered by a guarantee of the issuer or related entity[5] or subject to any other arrangement that legally or economically enhances the seniority of the claim.

m) The instrument is only issued with the approval of the owners of the issuing banking institution, either given directly by the owners or, if permitted by applicable law, given by the Board of Directors or by other persons duly authorised by the owners.

n) The instrument is clearly and separately disclosed on the banking institution's balance sheet.

10.3. Additional Tier 1 capital

Additional Tier 1 (AT1) capital consists of the sum of the following elements:

a) Instruments/shares issued by the banking institution that meet the criteria for inclusion in Additional Tier 1 capital (and are not included in Common Equity Tier 1);

b) Share premium resulting from the issue of instruments/shares included in Additional Tier 1 capital;

c) Instruments/shares issued by consolidated subsidiaries of the banking institution and held by third parties that meet the criteria for inclusion in Additional Tier 1 capital and are not included in Common Equity Tier 1; and

[4] In cases where capital instruments have a permanent write-down feature, this criterion is still deemed to be met by common shares.
[5] A related entity can include a parent entity, a sister company, a subsidiary or any other affiliate. A holding company is a related entity irrespective of whether it forms part of the consolidated banking group.

d) Regulatory adjustments applied in the calculation of Additional Tier 1 Capital.

10.4. Criteria for inclusion in Additional Tier 1 capital

An instrument must satisfy the following criteria to be included in Additional Tier 1 Capital:

a) The instrument is issued and fully paid-up in cash;

b) The instrument is subordinated to depositors, general creditors and subordinated debt of the banking institution (holders of tier 2 capital of the banking institution);

c) The paid-up amount of the instrument is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis banking institution creditors;

d) The instrument is perpetual, i.e. there is no maturity date and there are no step-ups or other incentives to redeem;

e) The instrument may only be callable at the initiative of the issuer only after a minimum of five years from the issue date, subject to the following requirements:

(i) To exercise a call option a banking institution must receive prior supervisory approval;

(ii) A banking institution must not do anything which creates an expectation that the call will be exercised; and

(iii) Banking institutions must not exercise a call unless:

a. They replace the called instrument with capital of the same or better quality and the replacement of this capital is done at conditions which are sustainable for the income capacity of the banking institution[6]; or

b. The banking institution demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised[7].

f) Any repayment of principal (e.g. through repurchase or redemption) must be with prior supervisory approval and banking institutions should not assume or create market expectations that supervisory approval will be given.

g) With regard to dividend or coupon on the share or instrument:

[6] Replacement issues can be concurrent with but not after the instrument is called.
[7] Minimum refers to the regulator's prescribed minimum requirement, which may be higher than the Basel III Pillar 1 minimum requirement.

(i) The banking institution must have full discretion at all times to cancel distributions/payments[8].

(ii) Cancellation of discretionary payments must not be an event of default.

(iii) Banking institutions must have full access to cancelled payments to meet obligations as they fall due.

(iv) Cancellation of distributions/payments must not impose restrictions on the banking institution except in relation to distributions to common stockholders.

h) Dividends/coupons must be paid out of distributable items.

i) The instrument cannot have a credit sensitive dividend feature, that is a dividend/coupon that is reset periodically based in whole or in part on the banking organisation's credit standing.

j) The instrument cannot contribute to liabilities exceeding assets if such a balance sheet test forms part of national insolvency law.

k) Instruments classified as liabilities for accounting purposes must have principal loss absorption through either (i) conversion to ordinary shares at an objective pre-specified trigger point or (ii) a write-down mechanism which allocates losses to the instrument at a pre-specified trigger point. The write-down will have the following effects:

(i) Reduce the claim of the instrument in liquidation;

(ii) Reduce the amount re-paid when a call is exercised; and

(iii) Partially or fully reduce coupon/dividend payments on the instrument.

l) Neither the banking institution nor a related party over which the banking institution exercises control or significant influence can have purchased the instrument, nor can the banking institution directly or indirectly have funded the purchase of the instrument.

m) The instrument cannot have any features that hinders recapitalisation, such as provisions that require the issuer to compensate investors if a new instrument is issued at a lower price during a specified time frame.

n) If the instrument is not issued out of an operating entity or the holding company in the consolidated group (e.g. a special purpose vehicle – "SPV"), proceeds must be immediately available without

[8] A consequence of full discretion at all times to cancel distributions/payments is that "dividend pushers" are prohibited. An instrument with a dividend pusher obliges the issuing bank to make a dividend/coupon payment on the instrument if it has made a payment on another (typically more junior) capital instrument or share. This obligation is inconsistent with the requirement for full discretion at all times. Furthermore, the term "cancel distributions/payments" means extinguish these payments. It does not permit features that require the bank to make distributions/payments in kind.

limitation to an operating entity or the holding company in the consolidated group in a form which meets or exceeds all of the other criteria for inclusion in Additional Tier 1 capital.

o) The terms and conditions of the capital instrument contain provisions which ensure its loss absorbency at the point of non-viability that meet the requirements set out in Annexure 1.

11. Tier 2 capital

Tier 2 Capital (gone-concern) includes other components of capital that, to varying degrees, fall short of the quality of Tier 1 Capital but nonetheless contribute to the overall strength of a banking institution and its capacity to absorb losses.

11.1. Tier 2 capital constitution

Tier 2 capital consists of the sum of the following elements:

a) Instruments issued by the banking institution that meet the criteria for inclusion in Tier 2 capital (and are not included in Tier 1 capital);

b) Share premium (stock surplus) resulting from the issue of instruments/shares included in Tier 2 capital;

c) Instruments issued by consolidated subsidiaries of the banking institution and held by third parties that meet the criteria for inclusion in Tier 2 capital and are not included in Tier 1 capital;

d) Certain loan loss provisions as specified below;

e) Unaudited interim profits approved by the banking institutions' boards of directors and reflected in the minutes of such meetings shall be included in Tier 2 capital once per quarter;

f) Surplus arising from revaluation of land and buildings on condition that such assets are prudently valued by an independent sworn appraiser, fully reflecting the possibility of price fluctuation and forced sale. The revaluation shall only be permitted after a period of three years from the date of purchase or three years from the date of last revaluation, whichever is the later. A haircut of 55.0 percent shall apply on the surplus arising from revaluation of land and buildings and should be disclosed in the Annual Financial Statement of banking institutions.

g) Regulatory adjustments applied in the calculation of Tier 2 Capital.

h) The treatment of instruments issued out of consolidated subsidiaries of the banking institution and the regulatory adjustments applied in the calculation of Tier 2 Capital are addressed in section 12 under "Tier 1 and Tier 2 qualifying capital issued by consolidated subsidiaries".

11.2. Instruments issued by the banking institution that meet the Tier 2 criteria

The objective of Tier 2 is to provide loss absorption on a gone-concern basis. An instrument is required to meet the following minimum set of criteria in order for it to be included in Tier 2 capital:

a) Issued and fully paid-up.

b) Subordinated to depositors and general creditors of the banking institution.

c) Is neither secured nor covered by a guarantee of the issuer or related entity or other arrangement that legally or economically enhances the seniority of the claim vis-à-vis depositors and general banking institution creditors.

d) Maturity:

(i) minimum original maturity of at least five years;

(ii) recognition in regulatory capital in the remaining five years before maturity will be amortised on a straight line basis[9];

(iii) there are no step-ups or other incentives to redeem.

e) May be callable at the initiative of the issuer only after a minimum of five years:

(i) To exercise a call option a banking institution must receive prior supervisory approval;

(ii) A banking institution must not do anything that creates an expectation that the call will be exercised[10]; and

(iii) Banking institutions must not exercise a call unless:

a. They replace the called instrument with capital of the same or better quality and the replacement of this capital is done at conditions which are sustainable for the income capacity of the banking institution[11]; or

b. The banking institution demonstrates that its capital position is well above the minimum capital requirements after the call option is exercised[12].

[9] Amortization based on the following sliding scale:

Included in capital	100%	80%	60%	40%	20%	0%
Years to maturity	5 years or more	4 years and < 5 years	3 years and < 4 years	2 years and < 3 years	1 year and < than 2 years	Less than 1 year

[10] An option to call the instrument after five years but prior to the start of the amortisation period will not be viewed as an incentive to redeem as long as the banking institution does not do anything that creates an expectation that the call will be exercised at this point.

[11] Replacement issues can be concurrent with but not after the instrument is called.

[12] Minimum refers to the regulator's prescribed minimum requirement, which may be higher than the Basel III Pillar 1 minimum requirement.

f) The investor must have no rights to accelerate the repayment of future scheduled payments (coupon or principal), except in insolvency and liquidation.

g) The instrument cannot have a credit sensitive dividend feature, that is a dividend/coupon that is reset periodically based in whole or in part on the banking institution's credit standing.

h) Neither the banking institution nor a related party over which the banking institution exercises control or significant influence can have purchased the instrument, nor can the banking institution directly or indirectly have funded the purchase of the instrument.

i) If the instrument is not issued out of an operating entity or the holding company in the consolidated group (e.g. a special purpose vehicle – "SPV"), proceeds must be immediately available without limitation to an operating entity[13] or the holding company in the consolidated group in a form which meets or exceeds all of the other criteria for inclusion in Tier 2 Capital.

11.3. Share premium (stock surplus) resulting from the issue of instruments included in Tier 2 capital. Share premium that is not eligible for inclusion in Tier 1, will only be permitted to be included in Tier 2 capital if the shares giving rise to the share premium are permitted to be included in Tier 2 capital.

11.4. General provisions/general loan-loss reserves held against future, presently unidentified losses are freely available to meet losses which subsequently materialise and therefore qualify for inclusion within Tier 2. Provisions ascribed to identify deterioration of particular assets or known liabilities, whether individual or grouped, should be excluded. Furthermore, general provisions/general loan-loss reserves eligible for inclusion in Tier 2 will be limited to a maximum of 1.25 percentage points of credit risk-weighted risk assets calculated under the standardised approach.

11.5. Surplus arising from revaluation of land and buildings that is owned by the banking institution and reflected in the audited financial statements as revaluation reserves provided that the assets are prudently valued by an independent sworn appraiser fully reflecting the possibility of price fluctuation and forced sale[14]. Only 45.0 percent of the revaluation reserves arising from land and buildings will be eligible for inclusion in Tier 2 capital.

12. Minority interest

Minority interest (i.e. non-controlling interest) and other capital issued out of consolidated subsidiaries that is held by third parties. This section should be applied in conjunction with requirements related to the Determination on Consolidated Supervision (BID- 24).

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[13] An operating entity is an entity set up to conduct business with clients with the intention of earning a profit in its own right.

[14] The surplus arising from revaluation of land and buildings that is owned by the banking institution must satisfy the following conditions:
(a) a banking institution may include in its tier 2 capital only reserves arising from the revalua tion of premises and other fixed assets owned by the banking institution provided that the assets are prudently valued by an independent sworn appraiser, fully reflecting the possibility of price fluctuation and forced sale; and
(b) the revaluation of fixed assets for purposes of inclusion in tier 2 capitals shall only be permitted after a period of three years from the date of purchase or three years from the date of last revaluation, whichever is later.

12.1. Ordinary shares issued by consolidated subsidiaries

a) Minority interest arising from the issue of ordinary shares by a fully consolidated subsidiary of the banking institution may receive recognition in Common Equity Tier 1 only if: 1) the instrument giving rise to the minority interest would, if issued by the banking institution, meet all of the criteria for classification as ordinary shares for regulatory capital purposes; and 2) the subsidiary that issued the instrument is itself a banking institution[15]. The amount of minority interest[16] meeting the criteria above that will be recognised in consolidated Common Equity Tier 1 will be calculated as follows (an example is provided under Annexure 7 (Minority Interest - Example)):

b) Total minority interest meeting the two criteria above minus the amount of the surplus Common Equity Tier 1 of the subsidiary attributable to the minority shareholders.

c) Surplus Common Equity Tier 1 of the subsidiary is calculated as the Common Equity Tier 1 of the subsidiary minus the lower of: (1) the minimum Common Equity Tier 1 requirement of the subsidiary plus the capital conservation buffer (i.e. 8.5 percent of risk weighted assets) and (2) the portion of the consolidated minimum Common Equity Tier 1 requirement plus the capital conservation buffer (i.e. 8.5 percent of consolidated risk weighted assets) that relates to the subsidiary.

d) The amount of the surplus Common Equity Tier 1 that is attributable to the minority shareholders is calculated by multiplying the surplus Common Equity Tier 1 by the percentage of Common Equity Tier 1 that is held by minority shareholders.

12.2. Tier 1 qualifying capital issued by consolidated subsidiaries

a) Tier 1 capital instruments issued by a fully consolidated subsidiary of the banking institution to third party investors (including amounts under section 10.1 above) may receive recognition in Tier 1 capital only if the instruments would, if issued by the banking institution, meet all of the criteria for classification as Tier 1 capital. The amount of this capital that will be recognised in Tier 1 will be calculated as follows:

(i) Total Tier 1 of the subsidiary issued to third parties minus the amount of the surplus Tier 1 of the subsidiary attributable to the third party investors.

(ii) Surplus Tier 1 of the subsidiary is calculated as the Tier 1 of the subsidiary minus the lower of: (1) the minimum Tier 1 requirement of the subsidiary plus the capital conservation

[15] For the purposes of this paragraph, any institution that is subject to the same minimum prudential standards and level of supervision as a bank may be considered to be a bank.

[16] Minority interest in a subsidiary that is a bank is strictly excluded from the parent bank's common equity if the parent bank or affiliate has entered into any arrangements to fund directly or indirectly minority investment in the subsidiary whether through an SPV or through another vehicle or arrangement. The treatment outlined above, thus, is strictly available where all minority investments in the bank subsidiary solely represent genuine third party common equity contributions to the subsidiary.

buffer (i.e. 10 percent of risk weighted assets) and (2) the portion of the consolidated minimum Tier 1 requirement plus the capital conservation buffer (i.e. 10 percent of consolidated risk weighted assets) that relates to the subsidiary.

(iii) The amount of the surplus Tier 1 that is attributable to the third party investors is calculated by multiplying the surplus Tier 1 by the percentage of Tier 1 that is held by third party investors.

b) The amount of this Tier 1 capital that will be recognised in Additional Tier 1 will exclude amounts recognised in Common Equity Tier 1 under section 8 above.

12.3. Tier 1 and Tier 2 qualifying capital issued by consolidated subsidiaries

a) Total capital instruments (i.e. Tier 1 and Tier 2 capital instruments) issued by a fully consolidated subsidiary of the banking institution to third party investors may receive recognition in Total Capital only if the instruments would, if issued by the banking institution, meet all of the criteria for classification as Tier 1 or Tier 2 capital. The amount of this capital that will be recognised in consolidated Total Capital will be calculated as follows:

(i) Total Capital instruments of the subsidiary issued to third parties minus the amount of the surplus Total Capital of the subsidiary attributable to the third party investors.

(ii) Surplus Total Capital of the subsidiary is calculated as the Total Capital of the subsidiary minus the lower of: (1) the minimum Total Capital requirement of the subsidiary plus the capital conservation buffer (i.e. 12.5 percent of risk weighted assets) and (2) the portion of the consolidated minimum Total Capital requirement plus the capital conservation buffer (i.e. 12.5 percent of consolidated risk weighted assets) that relates to the subsidiary.

(iii) The amount of the surplus Total Capital that is attributable to the third party investors is calculated by multiplying the surplus Total Capital by the percentage of Total Capital that is held by third party investors.

b) The amount of this Total Capital that will be recognised in Tier 2 will exclude amounts recognised in Common Equity Tier 1 and amounts recognised in Additional Tier 1.

c) Where capital has been issued to third parties out of a special purpose vehicle (SPV), none of this capital can be included in Common Equity Tier 1. However, such capital can be included in consolidated Additional Tier 1 or Tier 2 and treated as if the banking institution itself had issued the capital directly to the third parties only if it meets all the relevant entry criteria and the only asset of the SPV is its investment in the capital of the banking institution

in a form that meets or exceeds all the relevant entry criteria[17] (as required by criteria for Additional Tier 1 and criteria for Tier 2). In cases where the capital has been issued to third parties through an SPV via a fully consolidated subsidiary of the banking institution, such capital may, subject to the requirements of this paragraph, be treated as if the subsidiary itself had issued it directly to the third parties and may be included in the banking institution's consolidated Additional Tier 1 or Tier 2.

13. Regulatory adjustments

This section sets out the regulatory adjustments to be applied to regulatory capital that will be phased in from 1 September 2018 until full compliance in the year 2022. In most cases these adjustments are applied in the calculation of Common Equity Tier 1.

In terms of this determination, the phasing-in of the regulatory adjustments to Common Equity Tier 1 Capital, Additional Tier 1 Capital and Tier 2 Capital will be implemented over a period of five years. The transitional approach will begin at 20% of the required deduction on 1 September 2018, 40% on 1 September 2019, 60% on 1 September 2020, 80% on 1 September 2021 and reach 100% on 1 September 2022.

13.1 Goodwill and other intangibles (except mortgage servicing rights)

Goodwill and all other intangibles must be deducted in the calculation of Common Equity Tier 1, including any goodwill included in the valuation of significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation. With the exception of mortgage servicing rights, the full amount is to be deducted net of any associated deferred tax liability which would be extinguished if the intangible assets become impaired or derecognised under the relevant accounting standards (IFRS). The amount to be deducted in respect of mortgage servicing rights is set out in the threshold deductions section below.

13.2 Deferred tax assets

Deferred tax assets (DTAs) that rely on future profitability of the banking institution to be realised are to be deducted in the calculation of Common Equity Tier 1. Deferred tax assets may be netted with associated deferred tax liabilities (DTLs) only if the DTAs and DTLs relate to taxes levied by the same taxation authority and offsetting is permitted by the relevant taxation authority. Where these DTAs relate to temporary differences (e.g. allowance for credit losses) the amount to be deducted is set out in the "threshold deductions" section below.

13.3 Cash flow hedge reserve

a) The amount of the cash flow hedge reserve that relates to the hedging of items that are not fair valued on the balance sheet (including projected cash flows) should be derecognised in the calculation of Common Equity Tier 1. This means that positive amounts should be deducted and negative amounts should be added back.

[17] Assets that relate to the operation of the SPV may be excluded from this assessment if they are *de minimis* (negligible).

b) This treatment specifically identifies the element of the cash flow hedge reserve that is to be derecognised for prudential purposes. It removes the element that gives rise to artificial volatility in common equity, as in this case the reserve only reflects one half of the picture (the fair value of the derivative, but not the changes in fair value of the hedged future cash flow).

13.4 Gain on sale related to securitisation transactions

Derecognise in the calculation of Common Equity Tier 1 any increase in equity capital resulting from a securitisation transaction, such as that associated with expected future margin income (FMI) resulting in a gain-on-sale.

13.5 Cumulative gains and losses due to changes in own credit risk on fair valued financial liabilities

Derecognise in the calculation of Common Equity Tier 1, all unrealised gains and losses that have resulted from changes in the fair value of liabilities that are due to changes in the banking institution's own credit risk.

13.6 Defined benefit pension fund assets and liabilities

Defined benefit pension fund liabilities, as included on the balance sheet, must be fully recognised in the calculation of Common Equity Tier 1 (i.e. Common Equity Tier 1 cannot be increased through derecognising these liabilities). For each defined benefit pension fund that is an asset on the balance sheet, the asset should be deducted in the calculation of Common Equity Tier 1 net of any associated deferred tax liability which would be extinguished if the asset should become impaired or derecognised under the relevant accounting standards. Assets in the fund to which the banking institution has unrestricted and unfettered access can, with supervisory approval, offset the deduction. Such offsetting assets should be given the risk weight they would receive if they were owned directly by the banking institution.

13.7 Investments in own shares (treasury stock)

a) All of a banking institution's investments in its own ordinary shares, whether held directly or indirectly, will be deducted in the calculation of Common Equity Tier 1 (unless already derecognised under the relevant accounting standards). In addition, any own stock which the banking institution could be contractually obliged to purchase should be deducted in the calculation of Common Equity Tier 1. The treatment described will apply irrespective of the location of the exposure in the banking book or the trading book. In addition:

(i) Gross long positions may be deducted net of short positions in the same underlying exposure only if the short positions involve no counterparty risk. For both investments in own index shares and investments in unconsolidated financial entities that result from holdings of index securities, banking institutions are permitted to net off the gross long positions in own shares resulting from index securities

against short positions in the same underlying index as long as the maturity of the short position matches the maturity of the long positions or has residual value of at least one year. In such cases the short positions may involve counterparty risk (which will be subject to the relevant counterparty credit risk charge).

(ii) This deduction is necessary to avoid the double counting of a banking institution's own capital. Certain accounting regimes do not permit the recognition of treasury stock and so this deduction is only relevant where recognition on the balance sheet is permitted. The treatment seeks to remove the double counting that arises from direct holdings, indirect holdings via index funds and potential future holdings as a result of contractual obligations to purchase own shares.

b) Following the same approach outlined above, banking institutions must deduct investments in their own Additional Tier 1 in the calculation of their Additional Tier 1 capital and must deduct investments in their own Tier 2 in the calculation of their Tier 2 capital.

13.8. Reciprocal cross-holdings in the capital of banking, financial and insurance entities

Reciprocal cross holdings of capital that are designed to artificially inflate the capital position of banking institutions will be deducted in full. Banking institutions must apply a "corresponding deduction approach" to such investments in the capital of other banking institutions, other financial institutions and insurance entities. This means the deduction should be applied to the same component of capital for which the capital would qualify if it was issued by the banking institution itself.

13.9. Investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation and where the banking institution does not own 20.0 percent or more of the issued common share capital of the entity.

a) The regulatory adjustment described in this section applies to investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation and where the banking institution does not own more than 20.0 percent of the issued common share capital of the entity. In addition:

i) Investments include direct, indirect[18] and synthetic holdings of capital instruments. For example, banking institutions

should look through holdings of index securities to determine their underlying holdings of capital[19].

[18] Indirect holdings are exposures or parts of exposures that, if a direct holding loses its value, will result in a loss to the bank substantially equivalent to the loss in value of the direct holding.

[19] If banking intitutions find it operationally burdensome to look through and monitor their exact exposure to the capital of other financial institutions as a result of their holdings of index securities, national authorities may permit banking intitutions, subject to prior supervisory approval, to use a conservative estimate.

ii) Holdings in both the banking book and trading book are to be included. Capital includes common stock and all other types of cash and synthetic capital instruments (e.g. subordinated debt). It is the net long position that is to be included (i.e. the gross long position net of short positions in the same underlying exposure where the maturity of the short position either matches the maturity of the long position or has a residual maturity of at least one year).

iii) Underwriting positions held for five working days or less can be excluded. Underwriting positions held for longer than five working days must be included.

iv) If the capital instrument of the entity in which the banking institution has invested does not meet the criteria for Common Equity Tier 1, Additional Tier 1, or Tier 2 capital of the banking institution, the capital is to be considered ordinary shares for the purposes of this regulatory adjustment[20].

v) National discretion applies to allow banking institutions, with prior supervisory approval, to exclude temporarily certain investments where these have been made in the context of resolving or providing financial assistance to reorganise a distressed institution.

b) If the total of all holdings listed above in aggregate exceed 10.0 percent of the banking institution's common equity (after applying all other regulatory adjustments in full listed prior to this one) then the amount above 10.0 percent is required to be deducted, applying a corresponding deduction approach. This means the deduction should be applied to the same component of capital for which the capital would qualify if it was issued by the banking institution itself. Accordingly, the amount to be deducted from common equity should be calculated as the total of all holdings which in aggregate exceed 10.0 percent of the banking institution's common equity (as per above) multiplied by the common equity holdings as a percentage of the total capital holdings. This would result in a common equity deduction which corresponds to the proportion of total capital holdings held in common equity. Similarly, the amount to be deducted from Additional Tier 1 capital should be calculated as the total of all holdings which in aggregate exceed 10.0 percent of the banking institution's common equity (as per above) multiplied by the Additional Tier 1 capital holdings as a percentage of the total capital holdings. The amount to be deducted from Tier 2 capital should be calculated as the total of all holdings which in aggregate exceed 10.0 percent of the banking institution's common equity (as per above) multiplied by the Tier 2 capital holdings as a percentage of the total capital holdings.

[20] If the investment is issued out of a regulated financial entity and not included in regulatory capital in the relevant sector of the financial entity, it is not required to be deducted.

c) If, under the corresponding deduction approach, a banking institution is required to make a deduction from a particular tier of capital and it does not have enough of that tier of capital to satisfy that deduction, the shortfall will be deducted from the next higher tier of capital (e.g. if a banking institution does not have enough Additional Tier 1 capital to satisfy the deduction, the shortfall will be deducted from Common Equity Tier 1).

d) Amounts below the threshold, which are not deducted, will continue to be risk weighted. Thus, instruments in the trading book will be treated as per the market risk rules and instruments in the banking book should be treated according to the standardised approach. For the application of risk weighting the amount of the holdings must be allocated on a pro rata basis between those below and those above the threshold.

13.10 Significant investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation[21]

a) The regulatory adjustment described in this section applies to investments in the capital of banking, financial and insurance entities that are outside the scope of regulatory consolidation where the banking institution owns 20.0 percent or more of the issued common share capital of the issuing entity or where the entity is an affiliate[22] of the banking institution. In addition:

(i) Investments include direct, indirect and synthetic holdings of capital instruments. For example, banking institutions should look through holdings of index securities to determine their underlying holdings of capital[23].

(ii) Holdings in both the banking book and trading book are to be included. Capital includes common stock and all other types of cash and synthetic capital instruments (e.g. subordinated debt). It is the net long position that is to be included (i.e. the gross long position net of short positions in the same underlying exposure where the maturity of the short position either matches the maturity of the long position or has a residual maturity of at least one year).

(iii) Underwriting positions held for five working days or less can be excluded. Underwriting positions held for longer than five working days must be included.

(iv) If the capital instrument of the entity in which the banking institution has invested does not meet the criteria for Common Equity Tier 1, Additional Tier 1, or Tier 2 capital

[21] Investments in entities that are outside of the scope of regulatory consolidation refers to investments in entities that have not been consolidated at all or have not been consolidated in such a way as to result in their assets being included in the calculation of consolidated risk-weighted assets of the group.

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

[23] If banking intitutions find it operationally burdensome to look through and monitor their exact exposure to the capital of other financial institutions as a result of their holdings of index securities, national authorities may permit banking intitutions, subject to prior supervisory approval, to use a conservative estimate.

of the banking institution, the capital is to be considered ordinary shares for the purposes of this regulatory adjustment[24].

(v) National discretion applies to allow banking institutions, with prior supervisory approval, to exclude temporarily certain investments where these have been made in the context of resolving or providing financial assistance to reorganise a distressed institution.

b) All investments included above that are not ordinary shares must be fully deducted following a corresponding deduction approach. This means the deduction should be applied to the same tier of capital for which the capital would qualify if it was issued by the banking institution itself. If the banking institution is required to make a deduction from a particular tier of capital and it does not have enough of that tier of capital to satisfy that deduction, the shortfall will be deducted from the next higher tier of capital (e.g. if a banking institution does not have enough Additional Tier 1 capital to satisfy the deduction, the shortfall will be deducted from Common Equity Tier 1).

c) Investments included above that are ordinary shares will be subject to the threshold treatment described in the next section.

13.11. Threshold deductions

a) Instead of a full deduction, the following items may each receive limited recognition when calculating Common Equity Tier 1, with recognition capped at 10.0 percent of the banking institution's common equity (after the application of all regulatory adjustments set out above):

(i) Significant investments in the ordinary shares of unconsolidated financial institutions (banking institutions, insurance and other financial entities);

(ii) Mortgage Servicing Rights (MSRs); and

(iii) Deferred Tax Assets (DTAs) that arise from temporary differences.

b) On 1 September 2018, a banking institution must deduct the amount by which the aggregate of the three items above exceeds 15.0 percent of its common equity component of Tier 1 (calculated prior to the deduction of these items but after application of all other regulatory adjustments applied in the calculation of Common Equity Tier 1). The items included in the 15.0 percent aggregate limit are subject to full disclosure. As of 1 January 2021, the calculation of the 15.0 percent limit will be subject to the following treatment: the amount of the three items that remains recognised after the application of all regulatory adjustments must not exceed 15.0 percent of the Common Equity Tier 1 capital, calculated after all regulatory adjustments.

[24] If the investment is issued out of a regulated financial entity and not included in regulatory capital in the relevant sector of the financial entity, it is not required to be deducted.

c) The amount of the three items that are not deducted in the calculation of Common Equity Tier 1 will be risk weighted at 250.0 percent.

14. Capital conservation buffer

The capital conservation buffer (CCB) aims at promoting the conservation of capital and the build-up of adequate buffers above the minimum during normal times (i.e. outside periods of stress) which can be drawn down as losses are incurred during a stressed period.

14.1. Capital conservation elements

a) Outside of periods of stress, banking institutions should hold buffers of capital above the regulatory minimum.

b) When buffers have been drawn down, one way banking institutions should look to rebuild them is through reducing discretionary distributions of earnings. This could include reducing dividend payments, share buybacks and staff bonus payments. Banking institutions may also choose to raise new capital from the private sector as an alternative to conserving internally generated capital. The balance between these options should be discussed with supervisors as part of the capital planning process.

14.2 The framework

a) A capital conservation buffer of 2.5%, comprised of Common Equity Tier 1, is established above the regulatory minimum capital requirement.

b) Common Equity Tier 1 must first be used to meet the minimum capital requirements (including the 7.5 % and 10.0 % Total capital requirements if necessary) before the remainder can contribute to the capital conservation buffer.

c) Distribution constraints will be imposed on banking institutions when capital levels fall within the capital buffer ranges outlined in -Table 1. However, banking institutions will be able to conduct business as normal when their capital levels fall into the conservation range as they experience losses. Items subject to the restriction on distributions include dividends, share buybacks, discretionary payments on AT1 capital instruments and discretionary bonus payments to staff.

d) A banking institution must apply to the Bank to make payments in excess of the constraints imposed by the capital conservation buffer regime. However, any approval granted by the Bank shall be subject to the express condition that the banking institution raises capital from the market equal to or greater than the amount above the constraint which it wishes to distribute and to such other conditions as may be imposed by the Bank.

e) Table 1 below shows the minimum capital conservation ratios a banking institution must meet at various levels of the CET1 capital ratios. For example, within the first year, a banking institution with

a CET1 capital ratio in the range of 6.125% to 6.25% is required to conserve 80% of its earnings in the subsequent financial year (i.e. pay-out no more than 20% in terms of dividends, share buybacks and discretionary bonus payments). If the banking institution wants to make payments in excess of the constraints imposed by this regime, it would have the option of raising capital in the private sector equal to the amount above the constraint which it wishes to distribute.

f) The Common Equity Tier 1 ratio includes amounts used to meet the 6.0% minimum Common Equity Tier 1 requirement, but excludes any additional Common Equity Tier 1 needed to meet the 7.5% Tier 1 and 10.0% Total Capital requirements. For example, a banking institution with 10% CET1 and no Additional Tier 1 or Tier 2 capital would meet all minimum capital requirements, but would have a zero conservation buffer and therefore be subjected to the 100% constraint on capital distributions.

Table 1: Minimum Capital Conservation Ratios

Common Equity Tier 1 Ratio	Minimum Capital Conservation Ratios (Expressed as a % of earnings)
Minimum Capital Conservation Ratios as of 01 September 2018	
6.0% - 6.125%	100%
> 6.125% - 6.25%	80%
> 6.25% - 6.375%	60%
> 6.375% - 6.5%	40%
> 6.5%	0%
Minimum Capital Conservation Ratios as of 1 September 2019	
6.0% - 6.25%	100%
> 6.25% - 6.5%	80%
> 6.5% - 6.75%	60%
> 6.75% - 7.0%	40%
> 7.0%	0%
Minimum Capital Conservation Ratios as of 1 September 2020	
6.0% - 6.375%	100%
> 6.375% - 6.75%	80%
> 6.75% - 7.125%	60%
> 7.125% - 7.5%	40%
> 7.5%	0%
Minimum Capital Conservation Ratios as of 1 September 2021	
6.0% - 6.50%	100%
> 6.5% - 7.0%	80%
> 7.0% - 7.5%	60%
> 7.5% - 8.0%	40%
> 8.0%	0%
Minimum Capital Conservation Ratios as of 1 September 2022	
6.0% - 6.625%	100%
> 6.625% - 7.25%	80%
> 7.25% - 7.875%	60%
> 7.875% - 8.5%	40%
> 8.5%	0%

14.2. Other Key Aspects of the Requirements:

a) Elements subject to the restriction on distributions: Items considered to be distributions include dividends and share buybacks, discretionary payments on other Tier 1 capital instruments and discretionary bonus payments to staff. Payments that do not result in a depletion of Common Equity Tier 1, which may for example include certain scrip dividends, are not considered distributions.

b) Definition of earnings: Earnings are defined as distributable profits calculated prior to the deduction of elements subject to the restriction on distributions. Earnings are calculated after the tax which would have been reported had none of the distributable items been paid. As such, any tax impact of making such distributions are reversed out. Where a banking institution does not have positive earnings in addition to a Common Equity Tier 1 ratio of less than 6.5% within the first year, it would be restricted from making positive net distributions.

c) Solo or consolidated application: The framework should be applied at the consolidated level, i.e. restrictions would be imposed on distributions out of the consolidated group. The Bank will have the option of applying the regime at the solo level to conserve resources in specific parts of the group.

d) Additional supervisory discretion: Although the buffer must be capable of being drawn down, banking institutions should not choose in normal times to operate in the buffer range simply to compete with other banking institutions and win market share.

14.3 Transitional arrangements

a) The capital conservation buffer will be effective as from 1 September 2018. The gradual increase in the Capital Conservation Buffer will commence from 1 September 2018 and will end on 1 September 2022.

b) The Capital Conservation Buffer will commence at 0.5 percentage-points above minimum CET1 in the first year (1 September 2018) and gradually increase with 0.5 percentage-points above CET1 in every subsequent year until the final required level of 2.5 percent is reached on 1 September 2022.

c) Banking institutions that already meet the minimum ratio requirement during the transition period but remain below the 8.5% Common Equity Tier 1 target (minimum plus conservation buffer) should maintain prudent earnings retention policies with a view to meeting the conservation buffer as soon as reasonably possible.

d) The division of the buffer into quartiles that determine the minimum capital conservation ratios will begin on 1 September 2018. These quartiles will expand as the capital conservation buffer is phased in and will take into account any countercyclical buffer in effect during this period.

15. Leverage ratio

The leverage ratio will be phased in from 1 September 2018 commencing at 6.0 percent.

The leverage ratio is intended to achieve the following objectives:

a) To constrain the build-up of leverage in the banking sector to help avoid destabilization of the deleveraging processes that can be damaging to the broader financial system and the economy; and

b) To reinforce the risk based requirements with a simple, non-risk based "backstop" measure.

15.1 Definition and calculation of the leverage ratio

a) The leverage ratio is defined as the capital measure (the numerator) divided by the exposure measure (the denominator), with the ratio expressed as a percentage:

Ratio: Capital Measure /Exposure Measure

b) The minimum leverage ratio of 6% shall be maintained at all times.

15.2 Capital Measure

The capital measure for the leverage ratio will be Tier 1 capital, as per this Determination. Items that are deducted completely from capital do not contribute to leverage, and should therefore also be deducted from the measure of exposure.

15.3 Exposure measure

A banking institution's total exposure measure is the sum of the following exposures:

(a) on-balance sheet exposures;

(b) derivative exposures;

(c) securities financing transaction (SFT) exposures; and

(d) off-balance sheet (OBS) items.

15.4 General measurement principles

The exposure measure for the leverage ratio should generally follow the accounting value, subject to the following:

a) on-balance sheet, non-derivative exposures are included in the exposure measure net of specific provisions and valuation adjustments (e.g. accounting credit valuation adjustments);

b) physical or financial collateral, guarantees or credit risk mitigation purchased is not allowed to reduce on-balance sheet exposures; and

c) netting of loans and deposits is not allowed

15.5 On-balance sheet items

a) Banking institutions must include all balance sheet assets in their exposure measure, including on-balance sheet derivatives collateral and collateral for Securities Financing Transactions (SFT), with the exception of on-balance sheet derivative and SFT assets.

b) However, to ensure consistency, balance sheet assets deducted from Tier 1 capital may be deducted from the exposure measure. Two examples follow:

• Where a banking financial or insurance entity is not included in the regulatory scope of consolidation, the amount of any investment in the capital of that entity that is totally or partially deducted from CET1 capital or from Additional Tier 1 capital of the banking institution following the corresponding deduction may also be deducted from the exposure measure.

c) Liability items must not be deducted from the measure of exposure. For example, gains/losses on fair valued liabilities or accounting value adjustments on derivative liabilities due to changes in the banking institution's own credit risk must not be deducted from the exposure measure.

15.6 Derivatives exposure

a) Derivatives create two types of exposure: (a) an exposure arising from the underlying of the derivative contract; and (b) a counterparty credit risk (CCR) exposure. The leverage ratio framework uses the method set out below to capture both of these exposure types.

b) Banking institutions must calculate their derivative exposures, including where a banking institution sells protection using a credit derivative, as the replacement cost (RC) for the current exposure plus an add-on for potential future exposure (PFE). If the derivative exposure is covered by an eligible bilateral netting contract an alternative treatment may be applied.

c) For a single derivative exposure not covered by an eligible bilateral netting contract the amount to be included in the exposure measure is determined as follows:

exposure measure = replacement cost (RC) + add-on

where

RC = the replacement cost of the contract (obtained by marking to market), where the contract has a positive value.

add-on = an amount for PFE over the remaining life of the contract calculated by applying an add-on factor to the notional principal amount of the derivative.

d) Bilateral netting: when an eligible bilateral netting contract is in place, the RC for the set of derivative exposures covered by the contract will be the net replacement cost and the add-on will be *ANet*[25]

e) Collateral received: in connection with derivatives contracts may not be netted against derivative exposures whether or not netting is permitted under the banking institution's operative accounting or risk-based framework. When calculating the exposure amount, a banking institution must not reduce the exposure amount by any collateral received from the counterparty.

f) Similarly, with regard to the collateral provided, banking institutions must gross up their exposure measure by the amount of any derivatives collateral provided where the provision of that collateral has reduced the value of their balance sheet assets under their operative accounting framework.

g) The treatment of cash variation margin: in the treatment of derivative exposures for the purpose of the leverage ratio, the cash portion of variation margin exchanged between counterparties may be viewed as a form of pre-settlement payment, if the following conditions are met:

i) For trades not cleared through a qualifying central counterparty (QCCP) the cash received by the recipient counterparty is not segregated.

ii) Variation margin is calculated and exchanged on a daily basis based on mark-to-market valuation of derivatives positions.

iii) The cash variation margin is received in the same currency as the currency of settlement of the derivative contract.

iv) Variation margin exchanged is the full amount that would be necessary to fully extinguish the mark-to-market exposure of the derivative subject to the threshold and minimum transfer amounts applicable to the counterparty.

v) Derivatives transactions and variation margins are covered by a single Master Netting Agreement (MNA) between the legal entities that are the counterparties in the derivatives transaction. The MNA must explicitly stipulate that the counterparties agree to settle net any payment obligations covered by such a netting agreement, taking into account any variation margin received or provided if a credit event

[25] Credit exposure on bilaterally netted forward transactions will be calculated as the sum of the net mark-to-market replacement cost, if positive, plus an add-on based on the notional underlying principal. The add-on for netted transactions (ANet) will equal the weighted average of the gross add-on (AGross) and the gross add-on adjusted by the ratio of net current replacement cost to gross current replacement cost (NGR). This is expressed through the following formula: $ANet = 0.4 \cdot AGross + 0.6 \cdot NGR \cdot AGross$ where:

NGR = level of net replacement cost/level of gross replacement cost for transactions subject to legally enforceable netting agreements

AGross = sum of individual add-on amounts (calculated by multiplying the notional principal amount by the appropriate add-on factors of all transactions subject to legally enforceable netting agreements with one counterparty.

occurs involving either counterparty. The MNA must be legally enforceable and effective in all relevant jurisdictions, including in the event of default and insolvency.

h) If the conditions in the above paragraph are met, the cash portion of variation margin received may be used to reduce the replacement cost portion of the leverage ratio exposure measure, and the receivables assets from cash variation margin provided may be deducted from the leverage ratio exposure measure as follows:

i) In the case of cash variation margin received, the receiving banking institution may reduce the replacement cost (but not the add-on portion) of the exposure amount of the derivative asset by the amount of cash received if the positive mark-to-market value of the derivative contract(s) has not already been reduced by the same amount of cash variation margin received under the banking institution's operative accounting standard.

ii) In the case of cash variation margin provided to a counterparty, the posting banking institution may deduct the resulting receivable from its leverage ratio exposure measure, where the cash variation margin has been recognised as an asset under the banking institution's operative accounting framework.

iii) Cash variation margin may not be used to reduce the PFE amount (including the calculation of the net-to-gross ratio (NGR).

i) Treatment of clearing services: where a banking institution acting as Clearing Member (CM) offers clearing services to clients, the clearing member's trade exposure to the central counterparty (CCP) that arise when the clearing member is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that the CCP defaults, must be captured by applying the same treatment that applies to any other type of derivatives transactions. However, if the clearing member, based on the contractual arrangements with the client, is not obligated to reimburse the client for any losses suffered due to changes in the value of its transactions in the event that a QCCP defaults, the clearing member need not recognise the resulting trade exposures to the QCCP in the leverage ratio exposure measure.

j) Where a client enters directly into a derivatives transaction with the CCP and the CM guarantees the performance of its clients' derivative trade exposures to the CCP, the banking institution acting as the clearing member for the client to the CCP must calculate its related leverage ratio exposure resulting from the guarantee as a derivative, as if it had entered directly into the transaction with the client, including with regard to the receipt or provision of cash variation margin.

k) Additional treatment for written credit derivatives: in addition to the CCR exposure arising from the fair value of the contracts, written

credit derivatives create a notional credit exposure arising from the creditworthiness of the reference entity. Therefore, the credit written credit derivatives should be treated consistently with cash instruments (e.g. loans, bonds) for the purposes of the exposure measure.

l) In order to capture the credit exposure to the underlying reference entity, in addition to the above CCR treatment for derivatives and related collateral, the effective notional amount referenced by a written credit derivative is to be included in the exposure measure. The effective notional amount of a written credit derivative may be reduced by any negative change in fair value amount that has been incorporated into the calculation of Tier 1 capital with respect to the written credit derivative. The resulting amount may be further reduced by the effective notional amount of a purchased credit derivative on the same reference name, provided:

   i) the credit protection purchased is on a reference obligation which ranks *pari passu* with or is junior to the underlying reference obligation of the written credit derivative in the case of single name credit derivatives; and

   ii) the remaining maturity of the credit protection purchased is equal to or greater than the remaining maturity of the written credit derivative.

m) Since written credit derivatives are included in the exposure measure at their effective notional amounts, and are also subject to add-on amounts for PFE, the exposure measure for written credit derivatives may be overstated. Banking institutions may therefore choose to deduct the individual PFE add-on amount relating to a written credit derivative from their gross add-on.

15.7 Securities Financing Transaction (SFTs) Exposures

SFT are included in the exposure measure according to the following general treatment.

General treatment (banking institution acting as principal): the sum of the amounts in subparagraphs 15.7.1 and 14.7.2 below are to be included in the leverage ratio exposure measure:

15.7.1 Gross SFT assets recognised for accounting purposes (i.e. with no recognition of accounting netting), should be adjusted as follows:

a) exclude from the exposure measure the value of any securities received under an SFT, where the banking institution has recognised the securities as an asset on its balance sheet; and

b) cash payables and cash receivables in SFTs with the same counterparty may be measured net if all the following criteria are met:

i) Transactions have the same explicit final settlement date;

ii) The right to set off the amount owed to the counterparty with the amount owed by the counterparty is legally enforceable both currently in the normal course of business and in the event of: (i) default; (ii) insolvency; and (iii) bankruptcy; and

iii) The counterparties intend to settle net, settle simultaneously, or the transactions are subject to a settlement mechanism that results in the functional equivalent of net settlement, that is, the cash flows of the transactions are equivalent, in effect, to a single net amount on the settlement date. To achieve such equivalence, both transactions are settled through the same settlement system and the settlement arrangements are supported by cash and/or intraday credit facilities intended to ensure that settlement of both transactions will occur by the end of the business day and the linkages to collateral flows do not result in the unwinding of net cash settlement.

15.7.2 A measure of CCR calculated as the current exposure without an add-on for PFE, calculated as follows:

a) Where a qualifying MNA is in place, the current exposure (E^*) is the greater of zero and the total fair value of securities and cash lent to a counterparty for all transactions included in the qualifying MNA (ΣEi), less the total fair value of cash and securities received from the counterparty for those transactions (ΣCi). This is as illustrated in the following formula:

$$E^* = \max \{0, [\Sigma Ei - \Sigma Ci]\}$$

b) Where no qualifying MNA is in place, the current exposure for transactions with a counterparty must be calculated on a transaction by transaction basis: that is, each transaction *i* is treated as its own netting set, as shown in the following formula:

$$Ei^* = \max \{0, [Ei - Ci]\}$$

c) *Sale accounting transactions*: leverage may remain with the lender of the security in an SFT whether or not sale accounting is achieved under the operative accounting framework. As such, where sale accounting is achieved for an SFT under the banking institution's operative accounting framework, the banking institution must reverse all sales-related accounting entries, and then calculate its exposure as if the SFT had been treated as a financing transaction under the operative accounting framework (i.e.

the banking institution must include the sum of amounts in subparagraphs (i) and (ii) above for such an SFT) for the purposes of determining its exposure measure.

d) *Banking institution acting as agent*: a banking institution acting as agent in an SFT generally provides an indemnity or guarantee to only one of the two parties involved, and only for the difference between the value of the security or cash its customer has lent and the value of collateral the borrower has provided. In this situation, the banking institution is exposed to the counterparty of its customer for the difference in values rather than to the full exposure to the underlying security or cash of the transaction (as is the case where the banking institution is one of the principals in the transaction). Where the banking institution does not own/control the underlying cash or security resource, that resource cannot be leveraged by the banking institution.

e) Where a banking institution acting as agent in an SFT provides an indemnity or guarantee to a customer or counterparty for any difference between the value of the security or cash the customer has lent and the value of collateral the borrower has provided, then the banking institution will be required to calculate its exposure measure by applying only subparagraph (ii) above.

f) A banking institution acting as agent in an SFT and providing an indemnity or guarantee to a customer or counterparty will be considered eligible for the exceptional treatment set out in the paragraph above only if the banking institution's exposure to the transaction is limited to the guaranteed difference between the value of the security or cash its customer has lent and the value of the collateral the borrower has provided. In situations where the banking institution is further economically exposed (i.e. beyond the guarantee for the difference) to the underlying security or cash in the transaction, a further exposure equal to the full amount of the security or cash must be included in the exposure measure.

15.8 Off-balance sheet (OBS) items

a) OBS items include commitments (including liquidity facilities), whether or not unconditionally cancellable, direct credit substitutes, acceptances, standby letters of credit and trade letters of credit.

b) In the risk-based capital framework, OBS items are converted under the standardised approach into credit exposure equivalents through the use of credit conversion factors (CCFs).

16. Disclosure Requirements

Disclosure requirements in terms of this Determination will be in accordance with the Determination on Public Disclosures for Banking Institutions (BID-18).

PART IV CREDIT RISK-STANDARDIZED APPROACH

17. Calculation of Capital Charges for Credit Risk

a) A banking institution shall calculate its capital adequacy ratio, in relation to credit risk, as the ratio (expressed as a percentage) of the banking institution's capital base to an amount ("relevant amount") representing the degree of risk-weighted credit risk to which the institution is exposed, obtained by:

i) Calculation of risk-weights amount of the on balance sheet exposures by multiplying the gross amount of each asset net of specific provisions if any, by the asset's relevant risk-weight;

ii) For off-balance sheet exposures, a straightforward and approximate methodology is used to incorporate the off-balance exposure into the risk-weight capital framework. This involves the conversion of the credit risk inherent in each off-balance sheet item into an on-balance sheet credit-equivalent by multiplying the nominal gross amount of the off-balance exposures by a credit conversion factor. The resultant credit equivalent amount is assigned to the appropriate risk category according to the nature of the claims; Aggregate the figures derived under paragraph a) and b) to arrive at the relevant amount.

iii) Banking institutions may in calculating their capital adequacy ratios in relation to credit risk, reduce the risk-weighted amount of the banking institution's exposures in respect of an on-balance sheet asset or off-balance sheet exposures of the banking institution by taking into account the effect of any recognised credit risk mitigation techniques in respect of on-balance sheet asset or off-balance sheet exposure, as the case may be.

b) Where an on-balance sheet asset and off-balance sheet exposure of a banking institution has a current External Credit Assessment Institution's (ECAI) specific rating of the banking institution shall not be subjected to the requirements of paragraph 16.2 of BID-5 under Basel II[26] as the credit risk mitigation aspect has already been taken into account in the rating.

18. Risk-weights and exposure types

The supervisory risk weights to be assigned to various types of exposures in terms of this determination are those that are prescribed under the Basel II framework and are designed to ensure that the level of regulatory capital maintained by banking institutions is commensurate with the degree of credit risk inherent in different types of exposures, taking into account whether such exposures have an ECAI rating or not, and are structured as follows:

18.1 Claims on sovereigns

Claims on sovereign and their central banking institutions will be risk-weighted as follows:

[26] Paragraph 16.2 of BID-5 under Basel II arrangement deals with the treatment of collaterals where the legal mechanism by which collateral is pledged or transferred must ensure that the bank has the right to liquidate or take the possession thereof in a timely manner.

a) Where a sovereign has a current ECAI issuer rating, or a debt obligation issued or undertaken has a current ECAI rating, then the banking institution shall map the ECAI rating, as the case may be to a scale of uniform credit quality grades represented by the symbols of AAA to AA-, A+ to A-, BBB+ to BBB-, BB+ to B-, Below B- and Unrated for exposures to clients not assigned any ratings.

b) Where a sovereign has no current ECAI rating including a current short-term ECAI rating assigned to the debt obligation issued or undertaken by the sovereign, the banking institution shall allocate a risk-weight of 100% to a claim by the institution on the sovereign.

c) A risk-weight of 0% shall be permitted to banking institutions' exposures to the sovereign (or central bank) of incorporation denominated in domestic currency and funded in that currency subject to the condition that the local sovereign and the local central bank controls the issuing of local currency.

Table 2 Risk-weighting of claims on sovereigns and their central banks

Credit Assessment	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk-weight	0%	20%	50%	100%	150%	100%

18.2 Claims on Public Sector Entities (PSE)

Claims on non-central government public sector entities will be risk-weighted as follow;

a) All public sector entities claims shall be risk-weighted one category less favorable than the sovereign, subject to a floor of 20%, to claims with an original maturity of 3 months or less denominated and funded in domestic currency;

b) The exposures to PSE with an original maturity of more than three months and above shall be risk-weighted at 50%;

c) Where PSE is rated the credit rating assigned to the entity can be used for the purpose of applying risk-weight. However, it should be noted here that in the event such rating deteriorated while being utilized for risk weighting, banking institution s will not be allowed to use the risk bucket of unrated PSE.

d) Claims on Namibia Regional governments and local authorities are allocated a standard risk-weight of 20% regardless of the maturity profile of their exposures.

18.3 Claims on Multilateral Development Banks (MDB)

Claims on Multilateral Development Banks will be risk-weighted as follows:

a) All Multilateral Development Banks will be risk-weighted at 0% subject to complying to all eligibility criteria listed in Annexure 14 of this determination; or

b) The risk-weighting will be based on the external credit assessment of the banking institution itself with claims on unrated banking institution being risk-weighted at 50%. Under this option, a preferential risk-weight that is one category more favourable may be applied to claims with an original maturity of three months or less subject to a floor of 20%. This treatment will be available to both rated and unrated banking institutions, but not to banking institutions which are risk-weighted at 150%. (Table 3 on credit assessment of banking institutions is applicable)

18.4 Claims on Banks

Claims on banking institutions shall be risk-weighted as follows:

All banking institutions shall be risk-weighted based on their external credit assessment taking into account the maturity profiles of exposures as set out in Table 4 below. Long-term claims on unrated banking institutions will be risk-weighted at 50%.

Short-term claims that are funded and denominated in domestic currencies including unrated exposures shall be risk-weighted at 20% except for short-term exposures rated BB+ to B- and below B- that shall be risk-weighted at 50% and 150% respectively. All short-term claims that are funded and denominated in foreign currencies shall be risk-weighted utilising the risk-weight buckets of long term-exposures set out in Table 4. For the purpose of claims on banking institutions, short-term means a period of three months or less.

Table 3: Risk-weighting of claims on banking institutions

Credit assessment of banks	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk-weight For long term exposures	20%	50%	50%	100%	150%	50%
Risk-weight for Short-term exposures	20%	20%	20%	50%	150%	20%

18.5 Claims on Security firms

Claims on security firms may be treated as claims on banking institutions, provided such firms are subjected to supervisory and regulatory arrangements comparable to those under the Basel Framework (specifically risk based capital requirements). Claims on security firms not subjected to supervisory and regulatory arrangement shall be risk weighted following the rules applicable to claims on corporates.

18.6 Claims on corporate/commercial

a) Risk-weighting for rated corporates including claims on insurance companies will be based on the external credit assessment rating, while the risk-weighting for unrated corporate will be capped at 100%.

b) No claim for corporates will be assigned a risk-weight preferential to that assigned to the sovereign of its incorporation.

Table 4: Risk-weighting of claims on corporates

Credit assessment	AAA to AA-	A+ to A-	BBB+ to BB-	Below BB-	Unrated
Risk weight	20%	50%	100%	150%	100%

18.7 Claim included in the retail portfolios

Retail exposures will be risk-weighted at 75% subject to the condition that the following criteria are fully complied with:

a) *Orientation criterion* – the exposure is to an individual person or persons or to a small business;

b) *Product criterion* – the exposure takes the form of any of the following: revolving credits and lines of credit (including credit cards and overdrafts), personal term loans and lease (e.g. instalment loans, auto loans and lease, student loan and educational loans, personal finance) and small business facility and commitments;

c) *Granularity criteria* – The regulatory retail portfolio is sufficiently diversified to a degree that reduces the risk in the portfolio, warranting the 75% risk weight. Individual banking institutions may achieve this by establishing a numerical limit that no aggregates exposure to one counterparty can exceed 0.2% of the overall regulatory portfolio.

d) *Low value of individual exposures* – The maximum aggregated retail exposures to one counterpart cannot exceed an absolute threshold of N$ 7.5 million. Any retail exposures not meeting the above listed criteria shall be risk-weighted at 100%.

18.8 Claim secured by residential mortgage property

All exposures secured by mortgage on residential property that is or will be occupied by a borrower or that is rented, will be risk-weighted at 50%

a) The 50% risk-weight must be applied restrictively for residential purposes only.

b) Mortgage loans granted against the second, third or any other subsequent bond may also be accorded a reduced weight of 50% subject to the following conditions:

(i) Firstly, the banking institution is the holder of the first mortgage bond.

(ii) Secondly, in the event the banking institution is not the holder of the first mortgage bond then 100% risk weight shall be applied. As a prudential measure, it is a requirement in terms of this determination that recent valuation report of

the concerned property and the level of the client's exposure to the holder of the first mortgage bond, if any, must be obtained prior to the application of 50% risk-weight to determine the uncovered portion.

(iii) The unsecured portion of claims secured by residential mortgage bond that are past due for 90 days or more shall be risk-weighted at 100%, net of specific provisions.

18.9 Claim secured by commercial real estate

All exposures secured by mortgage on commercial real estate shall be risk-weighted 100%.

18.10 Treatment of past due loans

The unsecured portion of any loan, shall be risk-weighted taking into account the unsecured portion of any exposures that is past due for more than 90 days including rescheduled exposures which are not reclassified back to the accrual status as outlined in BID-2. The respective risk-weights shall be applied net of specific provisions (including partial write-offs) and shall be treated as follows:

a) A risk-weight of 150% will be assigned to exposures where the specific provisions amount is less than 20% of the outstanding balance of the loan;

b) A risk-weight of 100% will be applied to exposures where the specific provisions amount equal to or exceed 20% of the outstanding balance, but less than 50% of the outstanding balance of the loan;

c) A risk-weight of 50% will be applied to exposure where the specific provisions amount is equal to 50% or more of the outstanding balance of the loan.

d) Exposures that are rescheduled due to other arrangement and are not past due for 90 days or more shall not be subjected to the treatment outlined above.

18.11 Treatment of high risk categories

Assets grouped under these categories include claims on sovereigns, banking institutions and security firms rated below "B-", claims on corporate rated below "BB-"and past due loans where the amount of specific provisions is less than 20% of the outstanding loan amount. These assets shall be risk-weighted 150% or higher depending on the underlying risk associated with the claim. A risk-weight of 350% shall be applied to securitisation exposures that are assigned an external credit assessment rating of BB+ to BB-.

18.12 Other assets

Other assets refer to other forms of exposures that do not fit into the risk-weight structures of the above categories or claims, and all assets grouped under this category shall be risk-weighted as outlined in Table 5 below.

Table 5: Other assets

Assets Types	Risk Weights
Cash, gold, coin and bullion, tax overpaid	0%
Foreign notes and coins	0%
Statutory Reserve with Bank of Namibia	0%
Items in transit	20%
Investment in Equity or regulatory capital instruments Issued by banks or security firms, fixed assets and other assets	100%

18.13 Off-balance sheet items

a) A straight forward and approximate methodology is used to incorporate the off-balance sheet exposures into the risk-weight capital framework. This involves the conversion of credit risk inherent in each off-balance sheet item into an on-balance sheet credit equivalent by multiplying the nominal principal amount of the off-balance sheet exposures by a credit conversion factor (CCF). The resultant credit-equivalent amount is assigned to the appropriate risk category according to the nature of the claim. Table 6 below outline the credit conversion factors that shall be applied to various off-balance sheet exposures.

b) CCFs not specified in Table 6 below such as OTC derivatives and Securities Financing Transactions (SFTs) that expose a banking institution to counterparty credit risk is to be calculated under the rules set forth in paragraph 18.12, Table 6. Banks must closely monitor securities, commodities, and foreign exchange transactions that have failed, starting the first day they fail. A capital charge to failed transactions must be calculated in accordance with paragraph 18.12, Table 5.

c) With regard to unsettled securities, commodities and foreign exchange transactions, the Bank is of the opinion that banking institutions are exposed to counterparty credit risk from trade date, irrespective of the booking or the accounting of the transaction. Therefore, banking institutions are encouraged to develop, implement and improve systems for tracking and monitoring the credit risk exposure arising from unsettled transactions as appropriate for producing management information that facilitates action on a timely basis. Furthermore, when such transactions are not processed through a delivery-versus- payment (DvP) or payment-versus-payment (PvP) mechanism, banking institutions must calculate a capital charge as set forth paragraph 18.12, Table 6.

Table 6: Risk-weighting for off-balance sheet items

Off-balance sheet items	Credit Conversion Factors (CCF)
Commitment with original maturity of up to one year	**20%**
Commitment with original maturity of more than one year	**50%**

Commitments that are unconditionally cancellable at any time without prior notice or that provide for automatic cancellation due to the deterioration of the borrower's credit worthiness.	**0%**
Repurchase type of transactions involving security borrowing and lending	**100%**
Short term self-liquidating trade letters of credits with an original maturity of up to one year.	**20%**
Direct credit substitute e. g. general guarantees of indebtedness (including stand by letter of credit serving as financial guarantees for loans and securities) and acceptance	**100%**
Sales and repurchase agreement and assets sale with recourse where the credit risk remain with the banking institution	**100%**
Lending of banking institution's security or the posting of security as collateral by banking institutions including instances where these arise out of repo-style transaction	**100%**
Forward assets purchase, forward deposits and partly-paid shares and securities which represent commitment with certain draw down	**100%**
Certain transaction-related contingent items such as performance bond, bid bonds, warrantees and standby letters of credit related to particular transactions	**50%**
Note issuance facilities (NIFs) and revolving underwriting facilities (RUFs)	**50%**

19. Securitization Schemes

Risk-weightings and other operational requirements, Standardized Approach (TSA):

Table 7: Applicable risk-weights for unrated residential mortgage bonds

Long-term	
Risk-weights	**1250%**
Short-term	
Risk-weights	**1250%**

Where banking institutions have exposures (loans) that are assigned a rating by an eligible external credit assessment institution, they are allowed under this notice to utilize such ratings for the purpose of obtaining better risk-weights where appropriate (in comparison to the above mentioned 1250%).Table 8 below outlines the ratings and their corresponding risk-weights under the Standardized Approach.

Table 8: Ratings and corresponding risk-weights under Standardized Approach

Long-term ratings					
Rating	**AAA to AA**	**A to A-**	**BBB to BBB-**	**BB to BB-**	**B, below or unrated**
Risk-weights	**20%**	**50%**	**100%**	**350%**	**1250% or Deduction**
Short-term ratings					
Rating	**A-1/P-1**	**A-2/P2**	**A-3/P-3**	**Other rating or unrated**	
Risk-weights	**20%**	**50%**	**100%**	**1250% or deduction**	

The originating bank/risk transferor must reflect the underlying assets on their balance sheets and, apply the prescribed risk-weights for capital adequacy purpose as though the underlying exposures had not synthetically securitised (if the risk mitigating techniques utilized do not offer capital relief benefit). For banking institutions trading in the capacity of investors under the securitisation transaction, they must apply the appropriate risk-weights and treat the exposure like any other residential mortgage loans (investment in MBS) in their balance sheet.

If a banking institution must deduct a securitisation exposure from its total capital amount, the banking institution must take the deduction of 50% from tier 1 capital and 50% from Tier 2 capital. The deduction from regulatory capital can be applied to long-term securitisation exposures that are assigned an external credit assessment rating of B+ and below. Where the amount deductible from tier 2 capital exceed the banking institution's tier 2 capital, then the banking institution must deduct the excess from tier 1 capital.

PART V OPERATIONAL RISK

20. Measurement approaches to operational risk

a) Banking institutions shall comply with the standardised approach (TSA) for the measurement of a banking institution's exposures to operational risk.

b) A newly established banking institution that wishes to adopt the TSA approach for the measurement of a banking institution's exposures to operational risk –

(i) shall obtain the prior written approval of and comply with such conditions as may be specified by the *Bank*.

(ii) These conditions may include a period of initial monitoring by the *Bank* before the banking institution is allowed onto this approach for calculating capital charges in respect of operational risk;

(iii) as a minimum, shall comply with the relevant qualifying criteria specified in paragraph 23 (Qualifying criteria for Standardised Approach) below;

a. shall divide its activities into the designated eight business lines specified in Table 9 below;

b. shall calculate its capital charges in accordance with the relevant provisions specified in paragraph 23.2 below.

21. Basic indicator approach

21.1. A banking institution that is permitted to use the basic indicator approach shall subject to this paragraph at the end of each calendar quarter end date, determine the gross income for the three- year period (last three years) ending on the calendar quarter end date by:

a) aggregating the gross income recognised by the banking institution in the calendar quarter ending on the calendar quarter end date and in each of the immediately preceding 3 calendar quarters ("first year");

b) aggregating the gross income recognised by the banking institution in the four calendar quarters preceding the first year ("second year");

c) aggregating the gross income recognised in the 4 calendar quarters immediately preceding the second year ("third year");

d) multiplying the gross income for the banking institution for the last three years, by a capital charge factor of 15 per cent (denoted alpha), provided that:

(i) when the annual gross income for a particular year was negative or equal to zero, the banking institution shall exclude the relevant amount for that particular year from the numerator and exclude the given year(s) in the denominator during which gross income was negative, when the banking institution calculates the relevant average amount of gross income;

(ii) a newly established banking institution that does not have the required gross income data to calculate the required gross income figures may with the prior written approval of and subject to such conditions as may be specified by the Bank, use gross income projections for all or part of the three- year period. These projections shall be reasonable in relation to the expected risk profile of such a banking institution.

21.2 Formula BIA: Calculation of capital charge for operational risk under basic indicator approach

$K_{BIA} =$

where:

K_{BIA} = the capital charge under the basic indicator approach for calculating operational risk;

GI = gross income, where positive, of the last 3 years;

n = number of the last three years for which gross income is positive; and

$\alpha = 15\%$

22. Standardised approach

a) The measurement methodology in the paragraphs below outlines the calculation of operational risk capital charges and risk sensitivity under the TSA. This approach consists of measuring risk in the standardized manner, using the methodology in the calculation set out below.

b) In the TSA, a banking institution's activities are required to be divided into eight business lines: corporate finance, trading and sales, retail banking, commercial banking, payment and settlement, agency services, asset management, and retail brokerage. This mapping process of business lines are defined in more detail in the attached Schedule No. 1 – Principles for mapping of standardized business lines.

c) Within each business line, gross income is the indicator that serves as a proxy for the scale of business operations and thus the likely scale of operational risk exposure within each of the eight (8) business lines.

It should be noted that in the prescribed TSA, gross income shall be measured for each business line, and not the whole banking institution, i.e. in corporate finance, the indicator is the gross income generated in the corporate finance business line.

23. Calculation of capital charges for operational risk under the TSA

All banking institutions shall, at the end of each quarter, determine the capital charge for each standardised business line for the three years ("last 3 years") ending on the relevant quarter by –

a) aggregating –

(i) the gross income recognised by the banking institution in respect of each of the standardized business lines in the calendar quarter ending on the calendar quarter end date; and

(ii) the gross income recognised by the banking institution in respect of each of the standardized business lines in each of the preceding 3 calendar quarters ("first year").

b) aggregating the gross income recognised by the banking institution in respect of each of standardized business lines in the 4 calendar quarters immediately preceding the first year ("second year");

c) aggregating the gross income recognised by the banking institution in respect of each of the standardised business lines in the 4 calendar quarters immediately preceding the second year ("third year"); and

d) multiplying the gross income of the banking institution for each standardised business line in each of the first, second and third years calculated in sub paragraphs (a), (b) and (c) above by a capital charge factor (denoted beta value) assigned to each individual business line set out in Table 9 below.

Table 9: Capital charge factors applicable to standardised business lines

Standardised business lines	Consisting of:	Activities which may be included	Capital charge factors
Corporate finance (β1)	Corporate finance	Mergers and acquisitions, underwriting, privatizations, securitisation, research, debt (government or high yield), equity, syndications, IPO, secondary private placements	18%
	Municipal/ Government finance		
	Merchant banking		
	Advisory serviced		
Trading and sales (β2)	Sales	Fixed income, equity, foreign exchanges, commodities, credit, funding, own position securities, lending and repurchase/resale agreements, brokerage, debt, prime brokerage	18%
	Market making		
	Proprietary positions		
	Treasury		
Retail banking (β3)	Retail banking	Retail lending and deposits, banking services, trust and estates	12%
	Private banking	Private lending and deposits, banking services, trusts and estates, investment advice	
	Card services	Merchant/commercial/corporate cards, private labels and retail	
Commercial banking (β4)	Commercial banking	Project finance, real estate, export finance, trade finance, factoring, leasing, lending, guarantees, bills of exchange	15%
Payment and settlement (β5)	External clients	Payments and collections, funds transfer, clearing and settlement	18%
Agency services (β6)	Custody	Escrow, depository receipts, securities lending (customers) corporate actions	15%
	Corporate agency	Issuer and paying agency	
	Corporate trust		
Asset management (β7)	Discretionary fund management	Pooled, segregated, retail, institutional, closed, open, private equity	12%
	Non-discretionary fund management	Pooled, segregated, retail, institutional, closed, open, private equity	
Retail brokerage (β8)	Retail brokerage	Execution and full service	12%

23.1 Banking institutions shall calculate the capital charge for operational risk by –

a) adding together the eight (8) individual business lines calculated in respect of each of the standardised business lines for each of the last three (3) years; and

b) aggregating the capital charges calculated for the last three years and obtaining the mean average of the aggregate capital charges for the last three years by dividing the such figure by three (3).

23.2 Banking institutions shall, for the purposes of calculating the capital charge for operational risk, use the formula below.

Formula TSA: Calculation of capital charge for operational risk under standardised approach

$K_{TSA} =$

Where:

K_{TSA} = represents the capital charge under the standardised approach for operational risk;

GI_{1-8} = the gross income for each of the standardised business lines for each of the last three years; and

β_{1-8} = the capital charge factor assigned to each of the standardised business lines as specified in table 1.

23.3 Banking institutions using the formula for operational risk capital charges under the TSA –

a) may, in any given year of the last 3 years, off-set a positive capital charge for any standardised business line in the given year with a negative capital charge for any other standardised business line in the given year;

b) shall not off-set positive or negative capital charges for standardised business lines

c) if the aggregate capital charge for all the standardised business lines in any given year of the last three years is negative, banking institutions shall assign a zero (nil) value to that aggregate capital charge and exclude the given year (s) in which the negative gross income occurred in the denominator when calculating the last 3 years mean average.

24. Qualifying criteria for Standardised Approach

a) A banking institution that is in existence for more than three (3) years shall adopt the TSA approach for the measurement of a banking institution's exposures to operational risk –

(i) as a minimum, shall comply with the relevant qualifying criteria specified below;

(ii) shall divide its activities into the designated eight business lines specified in Table 9 above;

(iii) shall calculate its capital requirements in accordance with the relevant provisions specified above.

b) When a banking institution is unable to comply with the qualifying criteria specified for the TSA approach in order to measure the banking institution's exposure to operational risk, a banking institution may with the prior written

approval of the Bank apply a different measurement (i.e. basic indicator approach) on exposures to operational risk, subject to such conditions as the Bank may specify.

c) A newly established banking institution that wishes to adopt the TSA approach for the measurement of a banking institution's exposures to operational risk –

(i) shall obtain the prior written approval of and comply with such conditions as may be specified by the Bank. These conditions may include a period of initial monitoring by the Bank before the banking institution will be allowed onto this approach for calculating capital charges in respect of operational risk;

(ii) as a minimum, shall comply with the relevant qualifying criteria specified below;

(iii) shall divide its activities into the designated eight business lines specified in Table 9 above;

(iv) shall calculate its capital requirements in accordance with the relevant provisions as specified above.

d) Qualifying criteria

(i) As a minimum, a banking institution that wishes to adopt the standardised approach for the measurement of the banking institution's exposure to operational risk shall demonstrated to the satisfaction of the Bank –

a. that the banking institution's board of directors and senior management, as appropriate, are actively involved in the oversight of the operational risk management framework;

b. that the banking institution's operational risk management system that is conceptually sound and is implemented with integrity;

c. that the banking institution has sufficient resources in the use of the standardised approach in the major business lines as well as the banking institution's control and audit areas; and

d. that the banking institution has in place adequate policies and documented criteria to map its gross income into the designated business lines indicated in Table 9 above, in accordance with the principles specified in schedule 1 below.

(ii) As a minimum, in addition to the requirements specified in subparagraph (i) above, a banking institution with internationally active branches or subsidiaries that wishes to adopt the standardised approach for the measurement of the banking institutions exposures to operational risk –

a. shall have in place an adequate operational risk management system with clear responsibilities being assigned to an operational risk management function. This function shall among others be responsible for the development of strategies to identify, assess, monitor and control/mitigate the banking institution's exposures to operational risk;

b. the development of comprehensive policies and procedures relating to operational risk management and controls, including policies to address areas of non-compliance;

c. the design and implementation of a methodology to comprehensively assess the banking institution's exposure to operational risk;

d. the design and implementation of the risk reporting system in respect of operational risk;

e. the development and implementation of techniques to create incentives to improve the management and control of operational risk throughout the banking institution.

(iii) shall as part of the banking institution's internal operational risk management system track relevant operational risk data, including material losses by business lines-

a. which operational risk assessment system –

I. shall closely be integrated with the risk management processes of the banking institution; and

II. shall be subject to regular validation and independent review;(ii) the output of which shall form an integral part of the process to monitor and control the banking institution's operational risk profile, including any risk reporting, management reporting and risk analysis;

(iv) shall on a regular basis report to the relevant management of the banking institutions business units, the senior management of the banking institution and the board of directors on its exposures to operational risk, including material losses in respect of operational risk;

(v) shall duly document the banking institution's operational risk management systems;

(vi) shall have in place –

a. procedures to take appropriate action based on information contained in the reports submitted to the management of the banking institution's business units, the senior management of the banking institution and the board of director;

b. a robust process to ensure compliance with the banking institutions documented set of internal policies, controls and procedures concerning the operational risk management system;

c. policies that comprehensively deal with the manner in which any area or matter of non-compliance will be dealt with;

(vii) shall ensure that the banking institution's operational risk management process is subject to regular independent review.

25. Method for calculating the risk weighted amount for operational risk

a) In order to calculate a composite ratio and to ensure consistency in the calculation of capital charges for operational risk, an explicit arithmetic link is created by multiplying the capital charge for operational risk as per paragraph 23.2 above by 10 (i.e. reciprocal of minimum capital ratio of 10%). This is done in order to calibrate the risk weighted amount for operational risk. The resulting risk weighted figure shall be added to the sum of risk-weighted assets compiled for both credit and market risk purposes.

b) The capital adequacy ratio will then be calculated in relation to the sum of the three risk areas (i.e. credit, market and operational risk) using as a numerator only eligible capital.

26. Exceptions - provisions applicable where banking institutions have difficulties with the TSA to operational risk.

a) Where a banking institution-

(i) has been in operation for less than 18 months in any calendar quarter end date subsequent to the date on which this determination comes into operation; and

(ii) is undergoing a merger, acquisition or major restructuring;

then the banking institution –

(iii) shall not adopt the TSA to calculate operational risk, except with the prior written approval of the Bank;

(iv) may, with the prior written approval of the Bank adopt an alternative to the TSA (i.e. the basic indicator approach).

b) Where a banking institution has recorded negative gross income for the last 3 years immediately preceding that date, it will be subject to remedial measures to be determined by the Bank.

27. Risk management framework for operational risk

All banking institutions are required to have in place a comprehensive risk management framework for operational risk in accordance with the provisions of this determination, which shall be mandatory. The *Standard Operational Guideline*[27]

[27] Refer to Sound Practices for the Management and Supervision of Operational Risk, February 2003, available at www.bis.org

sets out a number of qualitative requirements for managing operational risk which all banking institutions are required to meet as a minimum.

PART VI MARKET RISK

28. Capital measures for market risk

a) Capital requirements for market risk apply on a solo and consolidated basis in the same way as for credit and operational risks. The Bank may permit banking groups assessed on a consolidated basis to report the long and short positions in exactly the same instrument (e.g. currencies, commodities and bonds), on a net basis, no matter where they are booked. The off-setting rules as set out under Annexure 6 (Calculation of Net Positions) of this determination may also be applied on a consolidated basis. The measurement allowed for market risk is the standard model approach. The standard model approach is the measure of risk obtained in each asset class (as defined in Annexure 6 (Calculation of Net Positions).

b) In order to calculate a composite ratio and to ensure consistency in the calculation of capital charges for market risk, an explicit arithmetic link is created by multiplying the overall capital charge for market risk in the statutory return by 10 (i.e. reciprocal of minimum capital ratio of 10%). This is done in order to calibrate the risk weighted amount for market risk. The resulting risk weighted figure shall be added to the sum of risk-weighted assets compiled for both credit and operational risk purposes.

29. Standardised Approach

This approach measures risk in a standardised manner, using the methods in the calculation set forth in Annexure 6 (Calculation of Net Positions). The capital charges for each of the different risk categories in Table 10 are then summed arithmetically.

Table 10: Methods of calculations (Refer to Annexure 5: timelines)

Risk category	Scope of Application
Interest rate risk (General and specific risk)	Trading book
Equities position risk	Trading book
Foreign exchange risk	All transactions, whether trading book or not
Commodities risk	All transactions, whether trading book or not
Option risk	Option associated with each of the preceding risk categories
Credit derivatives	Treatment of credit derivatives in the trading book

30. Limits to be observed

a) Limit on "overall" foreign exchange exposures – The overall foreign exchange risk exposure (short and long currency positions) both on- and off-balance sheet, as measured using spot mid-rate and the shorthand method shall not exceed 20% of a banking institution's capital funds.

b) Limit on "single" currency foreign exchange risk exposure – The foreign exchange risk exposure in major currencies such as USD, GBP, and EUR, irrespective of short or long position, shall not exceed 10% of a banking

institution's capital funds. For all other currencies the limit shall not be more than 5% of the banking institution's capital funds, irrespective of short or long position.

c) Limit on "intraday" foreign exchange risk exposure – The intra-day foreign exchange risk exposures, both in single currencies and overall, shall be monitored and maintained within prudent limits as established by a banking institution's board of directors in a written policy covering foreign exchange risk exposure.

d) Consolidated limits – The single currency and overall foreign exchange risk exposure limits indicated above shall apply on a consolidated basis, i.e. a banking institution may have different internal limits for its various branches; however, the limits set forth in this determination apply on a consolidated basis to the banking institution as a single, consolidated entity.

PART VII OTHER REGULATORY REQUIREMENTS

31. Maintenance of supporting documentation

Each banking institution shall maintain records which are sufficient to determine at all times its positions on exposures in all risk areas. Each banking institution shall also maintain a daily record showing close-of-business day positions in all exposures and a reconciliation of opening-to-closing positions.

32. Reporting Requirement

The banking institution shall, at the end of each calendar quarter submit to the Bank returns in terms of this determination in the format, frequency and submission date as specified by the Bank.

33. Declaration

If, in the normal course of business, a banking institution anticipates that it will not have adequate capital available to comply with the minimum ratios set forth in Part I of this determination or with any higher minimum ratio that may be required by the Bank, due to circumstances beyond the banking institution's reasonable ability to anticipate and control, then the banking institution shall in writing inform the Bank urgently as such, stating the reasons for non-compliance and indicating in a detailed plan how and when the position will be corrected.

34. Remedial measures

If a banking institution fails to comply with this determination, then the Bank may pursue any remedial measures as provided under the Act or any other measures the Bank may deem appropriate in the interest of prudent banking practice.

35. Effective date - Change

The Basel III capital accord will be effectively implemented by 2022, three years behind the recommended date by the Basel Committee, as follows: banking intuitions will be expected to fully comply with the new capital by 2022 (Refer to Annexure 5).

ANNEXURE 1: MINIMUM REQUIREMENTS TO ENSURE LOSS ABSORBENCY AT THE POINT OF NON-VIABILITY

1. Scope and post trigger instrument

a) The terms and conditions of all non-common Tier 1 and Tier 2 instruments issued by a banking institution must have a provision that requires such instruments, at the option of the relevant authority, to either be written off or converted into common equity upon the occurrence of the trigger event unless:

(i) the governing jurisdiction of the banking institution has in place laws that (aa) require such Tier 1 and Tier 2 instruments to be written off upon such event, or (bb) otherwise require such instruments to fully absorb losses before tax payers are exposed to loss;

(ii) a peer group review confirms that the jurisdiction conforms with clause (i); and

(iii) it is disclosed by the relevant regulator and by the issuing banking institution, in issuance documents going forward, that such instruments are subject to loss under clause (i) in this paragraph.

b) Any compensation paid to the instrument holders as a result of the write-off must be paid immediately in the form of ordinary shares (or its equivalent in the case of non-joint stock companies).

c) The issuing banking institution must maintain at all times all prior authorisation necessary to immediately issue the relevant number of ordinary shares specified in the instrument's terms and conditions should the trigger event occur.

2. Trigger event

a) The trigger event shall be the earlier of:

(i) a decision that a write-off, without which the reporting banking institution would become non-viable, is necessary, as determined by the Bank; and

(ii) the decision to make a public sector injection of capital, or equivalent support, without which the reporting banking institution would have become non-viable, as determined by the Bank.

b) The issuance of any new ordinary shares as a result of the trigger event must occur prior to any public sector injection of capital so that the capital provided by the public sector is not diluted.

c) The trigger event in relation to instruments issued by a fully consolidated subsidiary of a reporting banking institution shall be the earlier of:

(i) the issuance of a notice by a host regulator of the overseas subsidiary that conversion or write-off of capital instruments issued by the fully consolidated subsidiary of the reporting banking institution is necessary because, without it, the host regulator considers that the subsidiary would become non-viable;

(ii) a determination by the host regulator that without a public sector injection of capital or equivalent support, the overseas subsidiary would become non-viable; or

(iii) a non-viability trigger event occurs in relation to a parent banking institution in accordance with paragraph 4.

d) The trigger event in relation to instruments issued by a locally - incorporated subsidiary banking institution of a foreign banking institution shall be the earlier of:

(i) the issuance of a notice by the home regulator of the foreign banking institution to the foreign banking institution that conversion or write-off of capital instruments is necessary because, without it, the foreign banking institution or its subsidiary banking institution would become non-viable; or

(ii) a determination by the home regulator of the foreign banking institution that without a public sector injection of capital or equivalent support, the foreign bank or its subsidiary bank would become non-viable.

e) Any ordinary shares paid as compensation to the holders of the instrument must be ordinary shares of either the issuing banking institution or of the parent company of the consolidated group (including any successor in resolution).

ANNEXURE 2: ELIGIBLE LIQUIDITY FACILITIES

1. Banking institutions are permitted to treat off-balance sheet securitisation exposures as eligible liquidity facilities if the following minimum requirements are satisfied.

   a) The facility documentation must clearly identify and limit the circumstances under which it may be drawn. Draws under the facility must be limited to the amount that is likely to be repaid fully from the liquidation of the underlying exposures and any seller-provided credit enhancement. In addition, the facility must not cover any losses incurred in the underlying pool of exposures prior to a draw, or be structured such that draw-down is certain (as dictated by regular or continuous draws)

   b) The facility must be subjected to an asset quality test that precludes it from being drawn to cover credit risk exposures that display default status. In addition, if the exposures that a liquidity facility is required to fund have external rated securities, the facility can only be used to fund securities that are externally rated investment grade at the time of funding.

   c) The facility cannot be drawn after all applicable credit enhancements from which the liquidity facility would benefit, have been exhausted; and

   d) Repayment draw on the facility must not be subordinated to any interest of any note holder in the programme or subject to deferral or waiver.

   Where these conditions are met, the banking institution may apply a 20% CCF to the amount of eligible liquidity facilities with an original maturity of one year or less, and a 50% CCF shall be applied to the eligible liquidity facilities with an original maturity of more than one year. However, in the event an external rating of the facility itself is used for risk-weighting the facility, a 100% CCF must be applied. <u>For both controlled and non-controlled early amortization, a credit line is considered uncommitted if it is unconditionally cancellable without prior notice.</u>

2. Eligible liquidity facilities available only in the event of market disruption

Banking institutions may apply a 0% CCF to eligible liquidity facilities that are only available in the event of general market disruption (i.e. where upon more than one SPE across different transactions are unable to roll over maturing commercial paper, and the inability is not the result of an impairment in the SPEs' credit quality or in the credit quality of the underlying exposures). To qualify for this treatment, the requirements of eligible liquidity facilities must be complied with. Additionally, the fund advanced by the banking institution to pay holder of capital market instrument when there is a general market disruption must be secured by the underlying assets and must rank at least *pari passu* (equally) with the claims of holders of the capital market instruments.

3. Eligible Servicer Cash Advance Facilities

When the servicer is a banking institution other than the originator of securitisation transactions it is permitted under this determination to advance cash to ensure uninterrupted flow of payment to investors so long as the servicer is contractually entitled to full reimbursement and this right is senior to other claims on cash flow from the underlying pool of exposures. Undrawn cash advances or facilities that are unconditionally cancellable without prior notice shall receive a 0% Credit Conversion Factor.

ANNEXURE 3: CONTROLLED AND NON-CONTROLLED EARLY AMORTIZATION FEATURES

Early amortization provisions are mechanisms that, once triggered, allow investors to be paid out prior to the original stated maturity of the securitised issued. For risk based purposes, an early amortization provision will be considered either controlled or non-controlled.

1. **Controlled early amortization**

A controlled early amortization provision must meet all of the following conditions.

a) The banking institution must have an appropriate capital/liquidity plan in place to ensure that it has sufficient capital and liquidity available in the event of an early amortization.

b) Throughout the duration of the transaction, including the amortization period, there is the same pro rata sharing of interest, principal, expenses, losses and recoveries based on the banking institutions and investor's relative shares of the receivable outstanding at the beginning of each month.

c) The banking institution must set a period for amortization that would be sufficient for at least 90% of the total debt outstanding at the beginning of the early amortization period to have been repaid or recognised as in default; and

d) The pace of repayment should not be any more rapid than would be allowed by straight-line amortisation over the period set out in criterion (c).

2. Non-controlled early amortization

An early amortization provision that does not satisfy the conditions for a controlled early amortization in part or in whole, shall be treated under this determination as a non-controlled early amortization provision.

ANNEXURE 4: OPERATIONAL REQUIREMENTS FOR THE RECOGNITION OF RISK TRANSFERENCE

1. Traditional securitisation

Under traditional securitisation exposures, an originating banking institution may exclude securitised exposure from the calculation of risk-weighted assets only if all of the following conditions have been met. However, banking institutions meeting these conditions must still hold regulatory capital against any securitisation exposures they retain.

a) Significant credit risk associated with the securitised exposures has been transferred to a third party.

b) The transferor does not maintain effective or indirect control over the transferred exposures. The assets are legally isolated from the transferor in such a way that the exposures are put beyond the reach of the transferor and its creditors, even in the bankruptcy or receivership. These conditions must be supported by an opinion provided by a qualified legal counsel.

c) The securities issued are not obligations of the transferor. Thus, investor who purchase the securities only have claim to the underlying pool of exposures. The transferee is a Special Purpose Entity (SPE) and the holder of the beneficial interest in that entity has the right to pledge or exchange them without any restriction.

d) The securitisation does not contain clauses that (q) require the originating banking institution to alter systematically the underlying exposures such that the pool's weighted average credit quality is improved unless this is achieved by selling assets to independent and unaffiliated third parties at market prices; (b) allow for increase in a retained first loss position or credit enhancement provided by the originating banking institution after the transaction's inceptions; or (c) increase the yield payable to parties other than the originating banking institution, such as the investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the underlying pool.

2. Synthetic securitisations

For synthetic securitisations, the use of credit risk mitigation techniques (i.e. collateral, guarantees and credit derivatives) for hedging the underlying exposures may be recognised for risk-based capital purposes only if the conditions outlined below are satisfied:

a) Credit risk mitigation techniques must comply with the requirements as set out in section **16** of (BID-5 under Basel II arrangement which still applicable to treatment of collateral).

b) Eligible collateral for the purpose of providing capital relief are limited to those specified in paragraph **16.8** of (BID-5 under Basel II arrangement). Eligible collateral pledged by SPE may be recognised.

c) Eligible guarantors are defined in paragraph **16.8.3** and **16.8.4** of BID-5 under Basel II arrangement regarding guarantee by Government or license banking institution. Banking institutions may not recognize SPEs as eligible guarantors in the securitisation framework.

d) Banking institutions must transfer significant credit risk associated with the underlying exposures to third parties.

e) The instruments used to transfer credit risk may not contain terms or conditions that limit the amount of credit risk transferred, such as the following:

(i) Clauses that materially limit the credit protection or credit risk transference (e.g. significant materiality threshold below which credit protection is deemed not to be triggered even if a credit event occurs or those that allow for the termination of the protection due to deterioration in the credit quality of the underlying exposures)

(ii) Clause that requires the originating banking institution to alter the underlying exposures to improve the pool's weighted average credit quality;

(iii) Clause that increase the banking institution's cost of credit protection in response to deterioration in the pool's quality;

(iv) Clause that increase the yield payable to parties other than the originating bank, such as the investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the reference pool; and

(v) Clause that provide for increase in a retained first loss position or credit enhancements provided by the originating bank after the transaction's inception.

3. Treatment of clean-up calls

For securitisation transactions that include a clean-up call, no capital will be required due to the presence of a clean-up call if the following conditions are met:

a) The exercise of the clean-up call must not be mandatory, in form or substance, but rather must be at the discretion of the originating banking institution;

b) The clean-up call must not be structured to avoid allocating losses to credit enhancements or position held by investors or otherwise structured to provide credit enhancements; and

c) The clean-up call must only be exercisable when 10% or less of the original underlying portfolio, or securities issued remains, or for synthetic securitisations when 10% or less of the original reference portfolio value remains.

Securitization transactions that include a clean-up call that do not meet all of the above criteria shall result in capital requirements for the originating banking institution. For a traditional securitisation, the underlying exposures must be treated as if they were not securitised, while for synthetic securitisation, the banking institution purchasing protection must hold capital against the entire amount of securitised exposures as if they did not benefit from any credit protection.

4. Maintaining control over the transferred credit exposures

For the purpose of securitisation transactions, the transferor is deemed to have maintained effective control over the transferred exposures if it: (i) is able to repurchase from the transferee the previously transferred exposures in order to realize their benefits; (ii) is obligated to retain the risk of the transferred exposures. However, the transferor's retention of servicing rights to the exposures will not necessarily constitute indirect control of the exposures.

ANNEXURE 5: TIMELINES

Namibia Basel III implementation plan phases

Phased-in Arrangement					
	2018	**2019**	**2020**	**2021**	**2022**
Minimum Common Equity Capital Ratio	6.0%	6.0%	6.0%	6.0%	6.0%
Additional Tier 1 Capital (maximum)	1.5%	1.5%	1.5%	1.5%	1.5%
Common Equity Tier 1 Capital	7.5%	7.5%	7.5%	7.5%	7.5%
Capital Conservation Buffer	0.5%	1.0%	1.5%	2.0%	2.5%
Total Minimum Tier 1 Capital Ratio	8.0%	8.5%	9.0%	9.5%	10.0%
Tier 2 Capital	2.5%	2.5%	2.5%	2.5%	2.5%
Total Risk-Weighted Capital Ratio	10.5%	11.0%	11.5%	12.0%	12.5%
Leverage Ratio	6.0%	6.0%	6.0%	6.0%	6.0%

ANNEXURE 6: CALCULATING NET POSITIONS

1. Principles

The net position is the long balance (or net long position) or short balance or (net short position) of the transaction recorded by a banking institution in each of the securities in its trading book.

When calculating the net positions, banking institutions may fully off-set it's long and short positions (both actual and notional) in identical financial instruments. Financial instruments are regarded as identical provided that they are:

a) Launched by the same issuer;

b) Denominated in the same currency;

c) Loans to and debts from the same debtor with the same maturity;

d) Traded in the same national market; and

e) The same rank in case of insolvency.

Net positions are convertible into the reporting currency used to complete the market risk returns, at the spot exchange rate ruling on the reporting date.

2. Calculation of capital charges for derivatives

(a) Allowable off-setting of matched positions

A matched position in a future or forward contract and its corresponding underlying may also be fully offset[28], and thus excluded from the calculation. When the future or the forward contract comprises a range of deliverable instruments offsetting of positions in the future or forward contract and its underlying is only permissible in cases where there is a readily identifiable underlying security which is most profitable for the trader with a short position to deliver. The price of this security, sometimes called the "cheapest-to-deliver", and the price of the future or forward contract shall in such cases move in close alignment. No offsetting will be allowed between positions in different currencies[29]; the separate legs of cross-currency swaps or forward foreign exchange deals are to be treated as notional positions in the relevant instruments and included in the appropriate calculation for each currency.

In addition, opposite positions in the same category of instruments[30] can in certain circumstances be regarded as matched and allowed to offset fully.

To qualify for this treatment the positions must relate to the same underlying instruments, be of the same nominal value and be denominated in the same currency[31]. An additional netting method whereby a banking institution may treat as fully off-setting any position in interest rate derivatives such as the general position risk of debt instruments (e.g. separate legs of cross currency swap, forward rate agreements

[28] For instruments where the apparent notional amount differs from the effective notional amount, banking institutions must use the effective notional amount.
[29] The South African Rand and Namibia Dollar will be treated as same currency.
[30] This includes the delta-equivalent value of options. The delta equivalent of the legs arising out of the treatment of caps and floors as set out in Annexure 6 (calculating net positions) can also be off-set against each other under the rules laid down in this paragraph.
[31] The separate legs of different swaps may also be "matched" subject to the same conditions.

(FRA), currency options, money market transactions, caps, floors, swaptions, etc.), which at a minimum satisfy the following conditions:

i) *For futures:* The positions have the same nominal value and are denominated in the same currency and relate to the same underlying and mature within seven days of each other;

ii) *For swaps and FRAs:* The reference interest rates for floating instruments (positions) must be identical and the differential between coupons for fixed-rate positions is no greater than 15 basis points at the most;

iii) *For swaps, FRAs and forwards:* The upcoming interest-rate fixing date for floating rate instruments or, for fixed-rate instruments, residual maturity corresponds to the following limits:
- Less than one month: same day;
- Between one month and one year: within seven days;
- Over one year: within thirty days.

Banking institutions with large swap books may use alternative formulae for these swaps to calculate the positions to be included in the maturity or duration ladder. One method would be to first convert the payments required by the swap into their present values. For that purpose, each payment shall be discounted using zero coupon yields, and a single net figure for the present value of the cash flows entered into the appropriate time-band using procedures that apply to zero (or low) coupon bonds; these figures shall be slotted into the general market risk framework as set out in Annexure 6 (calculating net positions). An alternative method would be to calculate the sensitivity of the net present value implied by the change in yield used in the maturity or duration method and allocate these sensitivities into the time-bands set out in Table 13 or Table 12. Other methods which produce similar results could also be used. Such alternative treatments will, however, only be allowed if:

a. The *Bank* is fully satisfied with the accuracy of the systems being used;

b. The positions calculated fully reflect the sensitivity of the cash flows to interest rate changes and are entered into the appropriate time-bands;

This includes the delta-equivalent value of options. The delta equivalent of the legs arising out of the treatment of caps and floors as set out in Annexure 6 (calculating net positions) can also be offset against each other under the rules laid down in this paragraph. The separate legs of different swaps may also be "matched" subject to the same conditions.

a. The positions are denominated in the same currency.

(b) Specific risk

Interest rate and currency swaps, FRAs, forward foreign exchange contracts and interest rate futures will not be subject to a specific risk charge. This exemption also applies to futures on an interest rate index (e.g. LIBOR). However, in the case of futures contracts where the underlying is a debt security, or an index representing a basket of debt securities, a specific risk charge will apply according to the credit risk of the issuer as set out Annexure 6 (calculating net positions).

(c) General market risk

General market risk applies to positions in all derivative products in the same manner as for cash positions, subject only to an exemption for fully or very closely matched positions in identical instruments as defined in the paragraphs above. The various categories of instruments shall be slotted into the maturity ladder and treated according to the rules identified in the annexure below.

ANNEXURE 7: MINORITY INTEREST – EXAMPLE

Parent P

Common Equity	200	Inv. In CET1 of S	100
Other Liab.	800	Other Assets	900
Total	1000	Total	1000

Subsidiary S

Common Equity	150	Assets	600
Other Liab.	450	(Info: RWA 300)	
Total	600	Total	600

Consolidated Balance Sheet

Other Liab.	1250	Assets	1500
Common Equity (Parent)	200	Total	1500
Minority Interest (equity issued by sub. S to third parties)	50		
Total	1500		

Minority Interest (MI)

- Limited recognition in Basel III
  - Non-controlling interests increase consolidated capital without improve ability to absorb losses
  - MI absorbs only losses arising from the subsidiary out of which they have been issued

- Instruments from fully consolidated subsidiary recognised, if
  - It would qualify as corresponding capital (CET1, AT1, T2) if it had been issued by the banking institution and
  - Issuing subsidiary is itself a banking institution.

Minority Interest (MI) in CET

- Amount necessary for subsidiary (sub) to meet its own minimum CET1 included in consolidation
  - Recognises uncertainty in absorbing losses

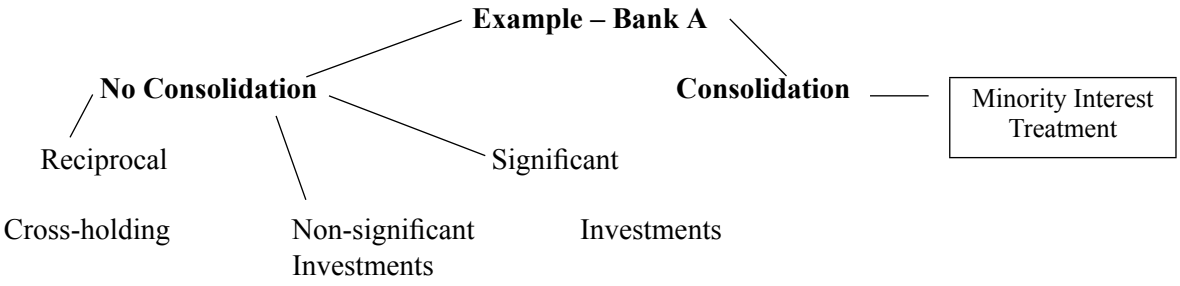
- MI resulting from fully consolidated sub recognised in banking institution's CET1 is total minority interest the amount of surplus common equity attributable to minority shareholder

- MI in the simple example (slide 22)

  - MI_{rec} = 50 – (150-(300*7%)) *1/3=
  - 50 – 129*1/3 = 7

Holdings of Banking, Financial and Insurance entities

- "Corresponding Deduction Approach" (CDA)
  - Deduct from same component of capital
- Direct, indirect and synthetic holdings of capital instruments (look through index securities)
- Net long position of trading and banking book
- Exclude underwriting positions (<= 5 days)
- Default instrument of holding is common share



Banking, Financial and Insurance entities	Banking, Financial and Insurance entities	Banking, Financial and Insurance entities
Deduct in full, and apply CDA, i.e. Corresponding Deduction Approach	A holds *not more than* 10% of entity's issued share capital, and If CE holdings of A in all entities > 10% of its own equity after adj. • Deduct amount above 10% (CDA) • Amount below 10% - apply RW	A holds CE>10% of entity's issued share capital or, Bank A's affiliate (≥20% voting sec. of the Co.) • Inv. In common shares – apply threshold deductions • Inv. Other than common shares- full deduction (apply CDA)

ANNEXURE 8: INTEREST RATE RISK

This section describes the standard framework for measuring the risk of holding or taking positions in debt securities and other interest related instruments in the trading book.

1. Specific Risk

The capital requirement for specific interest rate risk is intended to protect the banking institution against unfavourable movements in the price of a security owing to the deterioration in the credit quality of the individual issuer. In measuring the risk, off-setting will be restricted to matched positions in the identical issue (including positions in derivatives). Even if the issuer is the same, no off-setting will be permitted between different issues since the differences in coupon rate, liquidity, call features, etc. mean that prices may diverge in the short-run.

1.1 Specific risk capital charges for securities denominated in domestic currency

The specific risk capital charges are graduated in five broad categories as follows:

Table 11: Specific Risk Capital Charges categories

Government (All instruments issued by Government or instruments guaranteed by central Government)	0.00%
Qualifying Items (All loan stock listed on Bond Market Exchange, or any other financial exchange listed loan stock approved by NAMFISA[31])	0.25% (residual term to final maturity 6 months or less)
	1.00% (residual term to final maturity between 6 and 24 months)
	1.60% (residual term to final maturity exceeding 24 months)
Other	8.00%

1.2 Specific risk capital charges for securities denominated in foreign currency

The specific risk capital charges for securities denominated in foreign currency are graduated as follows.

Table 12: Specific risk capital charges

Categories	External credit assessment	Specific risk capital charge
Government	AAA to AA-	0%
	A+ to BBB-	0.25% (residual term to final maturity 6 months or less)
		1.00% (residual term to final maturity greater than 6 months and up to and including 24 months)
		1.60% (residual term to final maturity exceeding 24 months)
	BB+ to B-	8.00%
	Below B-	12.00%
	Unrated	8.00%

[1]. Namibia Financial Institutions Supervisory Authority

Qualifying		0.25% (residual term to final maturity 6 months or less)
		1.00% (residual term to final maturity greater than 6 months and up to and including 24 months)
		1.60% (residual term to final maturity exceeding 24 months)
Other	Similar to credit risk charges under Standardised Approach of Basel II Framework, e.g.	
	BB+ to BB-	8.00%
	Below BB-	12.00%
	Unrated	8.00%

The category "Government" will include all forms of government paper including bonds, Treasury bills and other short-term instruments. For securities denominated in a currency other than that of the issuing government (i.e. issued by foreign governments), all banking institutions need to apply the specified risk-weights based on external credit assessment ratings.

The category "Qualifying" in both tables above includes securities issued by public sector entities and multilateral development banking institutions, plus other securities that are:

a) Rated investment grade by at least two credit rating agencies **as *determined* by the *Bank*** (e.g. Baa or higher by Moody's and BBB or higher by Standard and Poor's); or

b) Rated investment grade by one rating agency and not less than investment grade by another rating agency **as determined by the *Bank*** (subject to supervisory oversight); or

c) Subject to supervisory approval, unrated, but deemed to be of comparable investment quality by the reporting banking institution and issuer has securities listed on a stock exchange.

d) The category "other" will receive the same specific risk charge as a private sector borrower under the credit risk requirements, i.e. 8% or risk weighted 100%.

1.3 Items for which there are no capital charges related to specific risk

There are no capital requirements relating to specific risk of the following items:

- Items deducted from capital above; and

The following items:

- temporary sales of securities and forward exchange-rate transactions, when they are carried out with the objective of benefiting from favourable movements in interest rates, or when they hedge another item in the trading book;

- other funding transactions, when they hedge another item in the trading book.

2. General Risk

The capital requirement for general interest rate risk is intended to protect the banking institution against the risk of losses resulting from unfavourable movements in market interest rates. Banking institutions may choose between two principal methods for calculating general risk:

- Maturity method using Table 13
- Duration method using Table 15

The steps for each method are as follows:

2.1. In brief the Maturity Method is calculated in the following manner.

a) First calculate the long and short position in each instrument and each issuer.

b) Slot long and short positions into the appropriate time bands set out in column 2 of Table 13 below, according to their residual maturity (maturity method) in the case of fixed-rate instruments and on the basis of the period until the interest rate is next set in the case of instruments in respect of which the interest rates are variable before final maturity or modified duration (duration method),

c) Multiply each of these positions by the risk weighting for the maturity time band as set out in column 4 of Table 13 below. This means, weighting the position in each time band by a factor designed to reflect the price sensitivity of these positions to overall changes in interest rates. It should be noted that, zero coupon bonds and deep - discounted bonds (defined as bonds with a coupon of less than 3%) shall be slotted into the time bands set out in the second column of Table 13.

d) The aggregate (sum) of the weighted long positions and aggregate (sum) of the weighted short positions in each time band shall then be calculated to produce a gross position figure. The aggregate of the former that are matched by the latter in a given maturity band shall be the matched weighted position, while the residual long and short position shall be the unmatched weighted position for the same time band.

e) The total matched weighted position and total unmatched weighted positions in each time band ("vertical disallowances") shall then be calculated.

f) Banking institutions will be allowed to conduct "horizontal off-setting" within each of three zones, which will result in a single short or long position for each time band.

g) Subsequently, banking institutions will be allowed to conduct "horizontal off-setting" between zones.

2.2. Calculation of capital requirements.

For each currency, calculate the additional capital requirement for option risk using the methods of Annexure 6 (calculating net positions).

a) Maturity Method

Step 1 – Calculation of weighted positions
The banking institution slots in the long and short position in each security or instrument, into the appropriate maturity bands in the following table:

Table 13: Maturity Method: Time-bands and weights

ZONE	Maturity Bands		Risk Weight (%)	Assumed changes in yield (interest rate)
	Coupon 3% or more	Coupon less than 3%		
(1)	(2)	(3)	(4)	(5)
One	0 - 1 month	0 - 1 month	0.00%	1.00
	> 1 – 3 months	> 1 – 3 months	0.20%	1.00
	> 3 – 6 months	> 3 – 6 months	0.40%	1.00
	> 6 – 12 months	> 6 – 12 months	0.70%	1.00
Two	> 1 – 2 years	> 1 – 1.9 years	1.25%	0.90
	> 2 – 3 years	> 1.9 – 2.8 years	1.75%	0.80
	> 3 – 4 years	> 2.8 – 3.6 years	2.25%	0.75
Three	> 4 – 5 years	> 3.6 – 4.3 years	2.75%	0.75
	> 5 – 7 years	> 4.3 – 5.7 years	3.25%	0.70
	> 7 – 10 years	> 5.7 – 7.3 years	3.75%	0.65
	> 10 – 15 years	> 7.3 – 9.3 years	4.50%	0.60
	> 15 – 20 years	> 9.3 – 10.6 years	5.25%	0.60
	> 20 years	> 10.6 – 12 years	6.00%	0.60
		> 12 – 20 years	8.00%	0.60
		> 20 years	12.50%	0.60

Note 1: Fixed-rate securities are slotted into maturity bands on the basis of their residual maturity; other instruments are slotted on the basis of the time remaining until the next interest-rate fixing. A distinction is also drawn between instruments with a coupon of 3% or more and instruments with a coupon of less than 3% (see table above).

Note 2: Each position is then multiplied by the weight indicated in column (4) for the corresponding maturity band.

Step 2 – Allowance for off-setting of positions
Within maturity bands: Weighted short positions and weighted long positions are off-set to determine the matched weighted position, resulting in a single time band and are called vertical disallowance. The short and long balance represents the unmatched weighted position for that time band.

Within zones: The banking institution calculates the sum of the unmatched weighted long positions in the time bands in each zone to obtain the unmatched weighted long position for that zone. Similarly, the unmatched weighted short positions of the time bands in each zone are summed to obtain the unmatched weighted short position for that zone and are called horizontal disallowance.

The portion of the unmatched weighted long position in a given zone which can be offset against the unmatched weighted short position in the same zone is the matched weighted position for that zone.

The portion of the unmatched weighted long or short position that cannot be offset in this fashion (the long or short balance) is the unmatched weighted position for that zone.

Between zones:

(i) The banking institution calculates the amount of the unmatched weighted long (or short) position for zone 1 which can be offset against the unmatched weighted short (or long) position for zone 2. This yields the matched weighted position between zones 1 and 2.

A similar calculation is carried out on the residual unmatched weighted position in zone 2 and the unmatched weighted position in zone 3, to yield the matched weighted position between zones 2 and 3.

(ii) The order of offsetting between zones may be reversed, in which case the matched weighted position between zones 2 and 3 is calculated first and the matched weighted position between the residual matched weighted position in zone 2 and the unmatched weighted position in zone 1 is calculated second.

(iii) The residual unmatched weighted position in zone 1 is then offset against the residual unmatched weighted position in zone 3 to yield the matched weighted position between zones 1 and 3.

(iv) This process of offsetting between zones yields the final residual unmatched weighted positions (final positions).

The off-setting will be subject to a scale of disallowance expressed as a fraction of the matched positions as set out in Table 14 below. The weighted long and short positions in each of three zones may be off-set, subject to the matched portion attracting a disallowance factor that is part of the capital charge.

Table 14: Horizontal Disallowance

Zone	Time-bands	Within the zone	Between adjacent zones	Between zones 1 and 3
One	0 - 1 month	40%	40%	100%
	> 1 – 3 months			
	> 3 – 6 months			
	> 6 – 12 months		40%	
Two	> 1 – 2 years	30%		
	> 2 – 3 years			
	> 3 – 4 years			
Three	> 4 – 5 years	30%		
	> 5 – 7 years			
	> 7 – 10 years			
	> 10 – 15 years			
	> 15 – 20 years			
	> 20 years			

Step 3 – Calculating the capital requirements

The banking institution's capital requirement for the trading book shall then be calculated and be equal to the sum of the vertical and horizontal disallowances:

- 10% of the sum of the matched weighted positions in all of the maturity bands, represent the capital charge for the vertical disallowances;

The following items represent the capital charge for the horizontal disallowances:

- 40% of the matched weighted position in zone one maturity band;
- 30% of the matched weighted position in zone two maturity band;
- 30% of the matched weighted position in zone three maturity band;
- 40% of the matched weighted position between zones one and two, and between zones two and three maturity band;
- 100% of the matched weighted position between zones one and three maturity band, and

The following item represents the capital charge for the overall net position:

- 100% of residual unmatched weighted positions or final position.

b) Duration Method

Banking institutions with the necessary means and capabilities to use this method continuously may with the *prior written approval of the Bank*, use this method in measuring all of their general market risk by calculating the price sensitivity of each position separately.

This method consists in calculating the modified duration of each debt security, then slotting the positions (weighted by their duration and by an assumed interest-rate change) into time bands, and finally off-setting weighted positions within the time bands, within zones and between different zones. The capital requirement is then calculated.

The mechanics of this method are as follows:

Step 1 - Calculation of Modified Duration

The banking institution shall ascertain the market value of each fixed-rate debt security and calculate the yield to maturity, which is the implicit discount rate for that security. In the case of variable-rate instruments, the banking institution shall take the market value of each instrument and calculate the yield on the assumption that the principal is due on the date on which the interest rate can be changed.

Banking institution shall then calculate the modified duration of each debt instrument using the following formula –

$$\text{Modified duration} = \frac{duration(D)}{(1+r)}$$

Where:

$$D = \sum_{t=1}^{M} \frac{C_t}{(1+r)^t}$$

Where:

r = yield to maturity (see step 1 above);
C_t = cash payment in time (t);
M = total maturity (see step 1 above)

Step 2 – Calculation of Weighted Position

- Each debt security is then slotted into one of the time bands in the duration-based ladder with the fifteen time bands set out in Table 15 below, based on its modified duration;

Table 15: Time – bands and assumed changes in yield

ZONE	Modified duration (in months or years)	Assumed changes in yield (interest rate) in percentage
(1)	(2)	(3)
One	0 - 1 month	1.00
	> 1 – 3 months	1.00
	> 3 – 6 months	1.00
	> 6 – 12 months	1.00
Two	> 1 – 1.9 years	0.90
	> 1.9 – 2.8 years	0.80
	> 2.8 – 3.6 years	0.75
Three	> 3.6 – 4.3 years	0.75
	> 4.3 – 5.7 years	0.70
	> 5.7 – 7.3 years	0.65
	> 7.3 – 9.3 years	0.60
	> 9.3 – 10.6 years	0.60
	> 10.6 – 12 years	0.60
	> 12 – 20 years	0.60
	> 20 years	0.60

- A banking institution shall then calculate in each time band the duration-weighted position for each instrument by multiplying the market price (value) by its modified duration and by the assumed interest rate (yield) change for an instrument with that particular modified duration.

Step 3 – Allowances for off-setting of positions

- The same method outlined for the maturity method is applied to the preceding table to obtain the matched weighted position and unmatched weighted positions in each time band, each zone and between zones.

Step 4 – Calculation of the capital requirements

A banking institution's capital requirements for the trading book shall be calculated as the sum of vertical and horizontal disallowances:

- 5% of the sum of the matched duration-weighted positions in all of the time bands represent the capital charge for the vertical disallowances;

The following items represent the capital charge for the horizontal disallowances:

- 40% of the matched duration-weighted position in zone one maturity band;
- 30% of the matched duration-weighted position in zone two maturity band;
- 30% of the matched duration-weighted position in zone three maturity band;
- 40% of the matched duration-weighted position between zones one and two, and between zones two and three maturity band;
- 100% of the matched duration-weighted position between zones one and three maturity band, and

The following item represents the capital charge for the overall net position:

- 100% of residual unmatched duration-weighted positions or final position.

3. Interest rate derivatives

The measurement system shall include all interest rate derivatives and off-balance-sheet instruments in the trading book which react to changes in interest rates, (e.g. forward rate agreements (FRAs), other forward contracts, bond futures, interest rate and cross-currency swaps and forward foreign exchange positions). Options can be treated in a variety of ways as described in Annexure 6 (calculating net positions). A summary of the rules for dealing with interest rate derivatives is set out in Table 16 below.

Table 16: Summary of treatment of interest rate derivatives

Instruments	Specific risk charge	General market risk charge
Exchange – traded future		
- Government debt security	No	Yes, as two positions
- Corporate debt security	Yes	Yes, as two positions
- Index on interest rates (e.g. LIBOR)	No	Yes, as two positions
OTC forward		
- Government debt security	No	Yes, as two positions
- Corporate debt security	Yes	Yes, as two positions
- Index on interest rates (e.g. LIBOR)	No	Yes, as two positions
FRAs, Swaps	No	Yes, as two positions
Forward foreign exchange	No	Yes, as one position in each currency
Options		Either

- Government debt security	No	Carve out together with the associated hedging positions simplified approach scenario analysis
- Corporate debt security	Yes	(b) General market risk charge according to the delta-plus method (gamma and vega shall receive separate capital charges)
- Index on interest rates (e.g. LIBOR)	No	
- FRAs, Swaps	No	

ANNEXURE 9: EQUITY – POSITION RISK

This section sets out minimum capital standards to cover the risk of positions in equities in the trading book. It applies to long and short positions in all instruments that exhibit market behaviour similar to equities. The instruments covered include ordinary shares, whether voting or non-voting, convertible securities that behave like equities, and commitments to buy or sell equity securities. Non-convertible preference shares are to be *excluded* from these calculations (they are covered by the interest rate risk requirements described in Annexure 6 (calculating net positions)). Long and short positions in instruments relating to the same issuer may be reported on a net basis. The treatment of derivative products, share indices and index arbitrage is described in Section 5 (calculation of capital charges) below.

As with debt securities, the minimum capital standard for equities is expressed in terms of two separately calculated charges for the "specific risk" of holding a long or short position in an individual equity and for the "general market risk" of holding a long or short position in the market as a whole.

a) **General Market Risk**

To determine the risk base, the banking institution calculates the sum of its net long positions and the sum of its net short positions in each equity security (in accordance with the methods described in Annexure 6 (calculating net positions). The difference between these two amounts represents the overall gross position. The long or short position in the market must be calculated on a market-by-market basis, i.e. a separate calculation has to be carried out for each national market in which the banking institution holds equities.

The capital charge for *general market risk* is the sum of the overall net positions (by national market) multiplied by 8%. Again, a separate capital charge calculation must be carried out for each national market in which a banking institution holds equities.

b) **Specific Risk**

Specific risk is defined as a proportion of the banking institution's gross equity positions (i.e. the sum of the absolute value of all long equity positions and of all short equity positions).

For positions in equity securities, the capital charge for *specific risk* will be 8%, unless the portfolio is both liquid and part of a well-diversified portfolio, in which case banking institutions may apply a reduced charge of 4%. A portfolio of liquid entities will be regarded as well diversified provided the following conditions are satisfied:

(i) No individual equity position comprises more than 10% of the market value of the banking institution's portfolio of equities traded on the market in each particular country ("country portfolio").

(ii) The sum of the total market value of equity positions which individually comprise between 5% and 10% of the total market value of the country portfolio does not exceed 50% of the total market value of the banking institution's portfolio in that country.

Individual equities included in the indices listed in Table 17 below are considered to be liquid (this list may be amended periodically).

The stocks making up the following indexes are internationally considered sufficiently liquid:

Table 17: List of Market Indices

CAC 40 (France)	AEX 25 (Netherlands)
STI (Singapore)	ASX 100 (Australia)
JSE TOP 20 (South Africa)	DAX (Germany)
Nikkei 225 (Japan)	FTSE 100 (Great Britain)
SP 100 (United States)	TSE 35 (Canada)

A capital charge of 2% is applied to positions on broadly diversified stock market indexes which are traded on a regulated or recognised market. Positions on sectoral indexes or on insufficiently diversified indexes are assigned a coefficient of 4%. When the banking institution takes opposite positions on the same index for different dates or on different exchanges, the 2% requirement applies only to one position, the opposing position being exempted. The capital requirement for specific risk is equal to the sum of the positions weighted by their capital charges.

Equity derivatives

Except for options, which are dealt with in Annexure 6 (calculating net positions), equity derivatives and off-balance sheet positions which are affected by changes in equity prices shall be included in the measurement system. This includes futures and swaps on both individual equities and on stock indices. The derivatives are to be converted into notional positions in the relevant underlying. The treatment of equity derivatives is summarised in Table 18 below.

Table 18: Summary of treatment of equity derivatives

Instruments	Specific risk charge	General market risk charge
Exchange – traded future or OTC futures		
Individual equity	Yes	Yes, as underlying
Index	2%	Yes, as underlying
Options (refer to Annexure 6 (calculating net positions))		Either
Individual equity	Yes	(a) Carve out together with the associated hedging position) - Simplified approach - Scenario analysis or (b) General market risk charge according to the delta-plus method (gamma and vega shall each receive a separate capital charge) Rho may be included with other interest rate exposures and described in Annexure 6 (calculating net positions).
Index	2%	

Calculation of positions

In order to calculate the standard method for specific and general market risk, positions in derivatives shall be converted into notional equity positions:

a) futures and forward contracts relating to individual equities shall be reported at current market prices;

b) futures relating to stock indices shall be reported as the marked-to-market value of the notional underlying equity portfolio;

c) equity swaps are to be treated as two notional positions; and

d) equity options and stock index options shall be either "carved out" together with the associated underlying (that is, the options and their associated hedges are excluded from the calculations performed for all other equity positions and a separate risk charge is obtained using the simplified approach or scenario analysis method set out in this Annexure) or be incorporated in the measurement of specific and general market risk described in this section according to the delta-plus method.

Calculation of capital charges

a) Measurement of specific and general market risk

Matched positions in each identical equity or stock index in each market may be fully offset, resulting in a single net short or long position to which the specific and general market risk charges will apply. For example, a future in a given equity may be offset against an opposite physical position in the same equity.

b) Risk in relation to an index

Besides general market risk, a specific risk capital charge of 2% will apply to the long or short position in an index contract listed in Table 18 above. Positions in indices not listed in Table 18 must either be decomposed into their component shares, or be treated as a single position based on the sum of current market values of the underlying instruments; if treated as a single position, the specific risk requirement is the highest specific risk charge which would apply to any of the index's constituent shares.

c) Arbitrage

In the case of the futures-related arbitrage strategies described below, the additional 2% capital charge described above may be applied to only one index with the opposite position exempt from a capital charge (both the specific and general risk capital charges).

The strategies are:

i. when the banking institution takes an opposite position in exactly the same index at different dates or in different market centres; or

ii. when the banking institution has an opposite position in contracts at the same date in different but similar indices, subject to the *Bank's* agreement that the two indices contain sufficient common components to justify offsetting.

Where a banking institution engages in a deliberate arbitrage strategy, in which a future contract on a broadly-based index matches a basket of shares, it may decompose the index position into notional positions in each of the constituent stocks and include these notional positions and the disaggregated physical basket in the country portfolio, netting the physical positions against the index equivalent positions in each stock.

Alternatively, on condition that:

a) The trade has been deliberately entered into and separately controlled; and

b) The composition of the basket of shares represents at least 90% of the index when broken down into its notional components or a minimum correlation between the basket of shares and the index of 0.9 can be clearly established over a minimum period of one year[32].

To determine whether a basket of shares represents at least 90 per cent of the index, the relative weight of each stock in the physical basket shall be compared to the weight of each stock in the index to calculate a percentage slippage from the index weights. For example, where a stock represents 5 per cent of the index, but the holding of that stock in the basket only represents 4.5 per cent of the total basket value, the percentage slippage of that stock is 0.5 per cent. Stocks which comprise the index but which are not held in the physical basket have a slippage equal to their percentage weight in the index. The sum of these differences across each stock in the index represents the total level of slippage from the index. In summing the percentage differences, no netting shall be applied between under market-weight and over market-weight holdings (i.e. the absolute values of the percentage slippages shall be summed). Deducting the total slippage from one hundred gives the percentage coverage of the index; this shall be compared to the required minimum of 90 per cent.

In such cases as described under (c) above (i.e. where conditions are met) the minimum capital requirement will be 4% (i.e. 2% of the gross value of the positions on each side) to reflect divergence and execution risks. This applies even if all the stocks comprising the index are held in identical proportions. Any excess value of the shares comprising the basket over the value of the futures contract, or excess value of the futures contract over the value of the basket is to be treated as an open long or short position and is dealt with in the paragraph below.

In the case of an arbitrage that does not satisfy the requirements of paragraph (c) above the index position shall be treated according to paragraph (b) as appropriate. The physical basket of shares shall then be disaggregated into individual positions and included in the country portfolio for calculation of the capital charge.

If a banking institution takes a position in depository receipts against an opposite position in the underlying equity or the same equity listed in a different country, it may offset the position (i.e. bear no capital charge) but only on condition that any costs on conversion are fully taken into account

[32] Banks that wish to rely on the correlation based criteria will need to satisfy the Bank on the accuracy of the method chosen.

ANNEXURE 10: FOREIGN EXCHANGE RISK

1. Calculating the Overall Net Position

The overall net position in foreign currencies is calculated in two stages.

1.1. Stage one

The banking institution calculates its net open position in each currency, excluding the Rand[33]. The position is the algebraic sum of the positive and negative items listed below.

1.1.1 Items included

The net open position in each currency shall be calculated by summing:

a. The net spot position (i.e. total assets minus total liabilities, including accrued interest denominated in the currency in question;

b. The net forward position (i.e. all amounts to be received less all amounts to be paid in forward foreign-exchange transactions, including currency futures and the principal on currency swaps not included in the spot position and interest rate transactions such as futures, swaps etc. denominated in foreign currency);

c. Guarantees (and similar instruments) that are certain to be called and are likely to be irrecoverable;

d. The net interest payable or receivable not yet accrued but already fully hedged;

e. At the discretion of the banking institution other net future income and expenses fully hedged by forward foreign exchange transactions;

f. Depending on particular accounting conventions in Namibia, any other item representing a profit or loss in foreign currency; and

g. The net delta (or delta-based) equivalent of the total currency-option book. Such positions may be netted against opposite positions in identical currencies. If the delta used is not calculated by a market authority, the calculation method chosen must be communicated in advance to the *Bank*, which may prohibit its use.

Positions in composite currencies need to be separately reported but, for measuring a banking institution's open position, may either be treated as a currency in their own right or split into their component parts on a consistent basis.

The net position in a currency is described as a net long position when the assets exceed the liabilities and as a net short position when the liabilities exceed the assets.

[33] The South African Rand and Namibia Dollar will be treated as same currency.

Items excluded

i. Transactions whose foreign-exchange risk is borne by the central government;

ii. The *Bank* may grant a banking institution's request to exclude long-term structural assets (equity participations in affiliates and subsidiaries, tangible and intangible fixed assets, etc.), which are financed in a currency other than the currency in which they are denominated.

Any change in the terms of exclusion of these categories of transactions requires the prior approval of the *Bank* (Refer to paragraph 3 (c) below).

1.1.3 Use of present value

Present value may be used to calculate the net open position in each currency, provided that the method used is deemed satisfactory by the *Bank*, in particular regarding the interest rates used in the discounting calculations.

1.1.4 Treatment of gold positions

The gold position is calculated separately. Gold is to be dealt with as a foreign exchange position rather than a commodity, because its volatility is more in line with foreign currencies and banking institutions need to manage it in a similar manner to foreign currencies. Where gold is part of a forward contract (quantity of gold to be received or to be delivered), any interest rate or foreign currency exposure from the other leg of the contract shall be reported as set out in Annexure 6 (calculating net positions) above.

1.2 Stage Two

The overall net foreign exchange position is calculated for each banking institution in different currencies such that the sum of long positions equals the sum of short positions. The aggregated overall net position is obtained by consolidating the individual positions calculated in this way.

2. Calculating Capital Requirements

Each position is converted to the banking institution's reporting currency using the spot exchange rate. The equivalent value of the foreign exchange position (the sum of the equivalent values of the long and short positions, excluding gold) gives rise to a capital requirement equal to 10% of the amount of the position. The position in gold also gives rise to a capital requirement equal to 10% of its amount.

3. Treatment of other specified items

a) Interest, other income and expenses Interest accrued (i.e. earned but not yet received) shall be included as a position. Accrued expenses shall also be included. Unearned but expected future interest and anticipated expenses may be excluded unless the amounts are certain and banking institutions have taken the opportunity to hedge them. If a bank includes future income/expenses they shall do so on a consistent basis, and shall not be permitted to select only those expected future flows which reduce their position at the reporting date.

b) Measurement of forward currency and gold positions.

Forward currency and gold positions will normally be valued at current spot market exchange rates. Using forward exchange rates would be inappropriate since it would result in the measured positions reflecting current interest rate differentials to some extent. However, banks which base their normal management accounting on net present values are expected to use the net present values of each position, discounted using current interest rates and valued at current spot rates, for measuring their forward currency and gold positions.

c) The treatment of structural positions

A matched currency position will protect a banking institution against loss from movements in exchange rates, but will not necessarily protect its capital adequacy ratio. If a banking institution has its capital denominated in its domestic currency (Namibian Dollar) and has a portfolio of foreign currency assets and liabilities that is completely matched, its capital/asset ratio will fall if the domestic currency depreciates. By running a short position in the domestic currency the banking institution can protect its capital adequacy ratio, although the position would lead to a loss if the domestic currency were to appreciate.

The *Bank* shall allow banking institutions to protect their capital adequacy ratio in this way. Thus, any positions which a banking institution has deliberately taken in order to hedge partially or totally against the adverse effect of the exchange rate on its capital ratio may be excluded from the calculation of net open currency positions, subject to each of the following conditions being met:

(i) such positions need to be of a "structural", i.e. of a non-dealing, nature (the precise definition shall be set by the *Bank*;

(ii) the *Bank* needs to be satisfied that the "structural" position excluded does no more than protect the banking institution's capital adequacy ratio;

(iii) any exclusion of the position needs to be applied consistently, with the treatment of the hedge remaining the same for the life of the assets or other items.

No capital charge need be applied to positions related to items that are deducted from a banking institution's capital when calculating its capital base, such as investments in non-consolidated subsidiaries, nor to other long-term participations denominated in foreign currencies which are reported in the published Accounts / Annual Financial Statements at historic cost. These may also be treated as structural positions.

Structural positions may be regarded as including:

(i) Any position arising from an instrument which qualifies to be included in a banking institution's capital base;

(ii) Any position entered into in relation to the net investment in a self-sustaining subsidiary, the accounting consequence of which is to reduce or eliminate what would otherwise be a movement in the foreign currency translation reserve; or

(iii) Investments in cross-border subsidiaries or associates which are fully deducted from a banking institution's capital for capital adequacy purposes.

Individual banking institutions will be required to submit their definition of structural positions, and policies concerning identification and management of those positions, to the Bank for approval and inclusion in banking institutions' management systems descriptions.

4. Measuring the foreign exchange risk in a portfolio of foreign currency positions and gold

Banking institutions shall apply the "shorthand" method which treats all currencies equally.

Under the shorthand method, the nominal amount (or net present value) of the net position in each foreign currency and in gold is converted at spot rates into the reporting currency. The overall net open position is measured by aggregating:

a) the sum of the net short positions or the sum of the net long positions, whichever is the greater; plus

b) the net position (short or long) in gold, regardless of sign.

The capital charge will be 10% of the overall net open position (see example below).

Table 19: Example of the shorthand measure of foreign exchange risk[34]

YEN	EURO	GB£	CHF	US$	GOLD
+50	+100	+150	-20	-180	-35
	+300		-200		35

Capital charge would be 10% of the higher of either the net long currency positions or the net short currency positions (i.e. 300) and of the net position of gold (35) = 335 x 10% = 33.5

[34] Foreign currency: Limits for overall foreign exchange exposure, single currency foreign exchange risk exposures, all other currency, intradey foreign exchange risk exposures and consolidated limits are defined in paragraph 30(a) and (d) of this Determination.

ANNEXURE 11: COMMODITIES RISK

1. Calculating Positions

1.1. General rules

Positions in commodities are calculated as follows:

a) Positions in the same commodity are netted. Positions in different commodities may not be offset against each other. However, *with the prior written approval of the Bank*, positions in sub-categories of the same commodity may be offset if they are substitutable for each other and if the banking institution can clearly demonstrate a 0.9 correlation in their price movements over a minimum period of one year;

b) Spot and forward positions are expressed in standard units of measurement (barrels, kilograms, etc.) and converted at the spot rates for the commodity into the domestic currency. These positions are entered in a maturity table, a model of which is given in Table 20 below;

c) In order to capture forward gap and interest rate risk within a time band (which, together, are sometimes referred to as curvature / spread risk) matched long and short positions in each time band will carry a capital surcharge. The methodology will be rather similar to that used for interest rate related instruments as set out in Annexure 6 (calculating net positions). A separate maturity ladder will be used for each commodity.

(i) All derivative instruments and other positions whose value is affected by changes in the price of commodities must be included in the measurement system.

(ii) Options may be excluded from the commodities position along with the underlying hedges, and subjected to a special treatment (scenario analysis or simplified approach: see Annexure 6 (calculating net positions)).

1.2 Special rules for derivative products

a) Futures and commodities forwards must be included in the measurement system as notional amounts expressed in standard units and must be assigned a maturity corresponding to the expiry date;

(i) Commodity swaps where one leg is at a fixed price and the other is at the current market price must be included as a set of positions equal to the notional amount, with one position for each payment in the corresponding band of the table. Positions will be long if the banking institution pays a fixed price and receives a floating price and short in the opposite case; and

(ii) Commodity swaps where the legs are in different commodities are to be incorporated in the relevant maturity ladder and entered in each of the corresponding tables;

Table 20: Maturity table and spread rates

Maturity Band	Spread Rate
0 – 1 month	1.5%
1 – 3 months	1.5%
3 – 6 months	1.5%
6 – 9 months	1.5%
9 – 12 months	1.5%
1 – 2 years	1.5%
2 – 3 years	1.5%
> 3 years	1.5%

1.3 Calculating capital requirements

1.3.1 Maturity table method

Positions in individual commodities are entered in a maturity table, with spot positions entered in the first band. A separate maturity ladder shall be used for each commodity, as follows:

a) For each time – band, the sum of the long and short positions which are matched will be multiplied by the spot price of the commodity, and then by the appropriate spread rate associated with that band (set out in Table 20 above).

b) In the following step, the residual net position is successively carried forward to offset exposures in time bands that are further out, where applicable, against opposite positions by applying the spread rate coefficient. Each time a position is carried forward to the next time bands, a capital surcharge equal to 0.6% of the amount carried forward is applied[35]. The capital surcharge for each matched amount created by carrying position forward will be calculated as explained above.

c) These successive carry forwards determines the net position, which is subject to a capital requirement equal to 15% of the amount.

1.3.2. Simplified approach

In calculating the capital charge for directional risk, the same procedures shall be adopted as in the maturity ladder approach. Banking institutions may opt for the simplified method of calculating the capital requirement. It is equal to 15% of the net position in each commodity plus 3% of the gross position (absolute value of long plus short position regardless of maturity), to cater for the protection of the banking institution against basis risk, interest rate risk and forward gap risk. In valuing the gross positions in commodity derivatives for this purpose, banking institutions shall use the current spot price.

[35] It should be noted that, the position carried forward will also be multiplied by the number of time bands over which the residual net position is carried across.

ANNEXURE 12: OPTION RISK

Banking institutions may choose between three different methods to calculate capital requirements for their options portfolios:

a. The Delta-plus method,
b. Scenario analysis method,
c. The Simplified method (available only in certain cases).

1. Delta plus method

Banking institutions convert their options into equivalent positions in the underlying and include them in the positions as described in Annexure 6 (calculating net positions).

The capital requirements for general risk and, where relevant, specific risks are calculated on these positions in accordance with Annexures 8 to 11 (interest rate risk, equity risk, foreign exchange risk, and commodities risk). Such options shall be reported as a position equal to the market value of the underlying multiplied by delta.

However, the delta plus method does not sufficiently cover the risks associated with options positions, and banking institutions are thus required to measure Gamma and Vega. This method imposes additional capital requirements to cover the risk associated with the non-linear behaviour of options ("Gamma risk" – measures the rate of change of delta) and the sensitivity of options to the volatility of the underlying ("Vega risk"). Gamma and Vega factors are calculated for each individual option position (including hedge positions) and aggregated by underlying. These sensitivities will be calculated according to an approved exchange model or to the banking institution's proprietary options pricing model, which shall be subject to the oversight of the *Bank*.

Gamma is defined as the second derivative of the value of the option in relation to the underlying. Gamma risk is calculated using the following formula:

Gamma risk = ½ x gamma x (variation in the underlying) ^{2}

Variation in the underlying can be denoted as VU

The variation in the underlying (VU) is determined in the same way as in calculating general risk, namely:

i) For options on interest-rate instruments, banking institutions may calculate the gamma either directly in relation to the underlying interest rate or in relation to the market value of the underlying. In the first case, the variation of the underlying is the assumed interest-rate change as defined in Table 13 (maturity method: time bands and weights) of Annexure 8 (that contains the summary of treatment of interest rate derivatives)[36].

ii) This means that for interest rate instruments if the underlying is a bond, the market value of the underlying shall be multiplied by the risk weights set out in Table 15 of Annexure 8 (that contains the summary of treatment of interest rate risk derivatives)[37]; An equivalent calculation shall be carried out where the underlying

[36]. Positions have to be slotted into separate maturity ladders by currency.
[37] Banks using the duration method shall use the time bands as set out in Table 15 of Annexure 8.

is an interest rate, again based on the assumed changes in the corresponding yield in Table 16 of Annexure 8 (summary of treatment of interest rate derivatives).

iii) In the second case, the variation of the underlying is calculated as follows: *value of the position x modified duration x interest rate change* (see Annexure 8 (that contains the summary of treatment of interest rate derivatives);

iv) For options on equity securities and equity-market indexes, the market value of the underlying shall be multiplied by 8%;

v) For foreign exchange and gold options, the exchange rate for the currency pair concerned, or the market price of gold shall be multiplied by 8%;

vi) For options on commodities, the market value of the commodity shall be multiplied by 15%.

For the purposes of this calculation the following positions shall be treated as the same underlying:

a. For equity securities and stock-market indexes, each national market,

b. For interest-rate instruments, each maturity time band as defined in Annexure 8 (that contains the summary of treatment of interest rate derivatives),

c. For currencies and gold, each pair of currency and gold,

d. For commodities, the position in each individual product as defined in Annexure 8 (that contains the summary of treatment of interest rate derivatives).

Each option on the same underlying will have either a positive or a negative impact on Gamma. These individual impacts are summed, yielding a net impact on Gamma for each underlying which may be positive or a negative. Only negative net impacts on Gamma are included in the calculation of capital requirements. The total Gamma capital charge will be the sum of the absolute value of the net negative Gamma impacts as calculated above.

b) **Vega** (volatility risk) is the derivative of the option price in relation to the implied volatility of the underlying. Vega risk is calculated using the following formula:

Vega risk = Vega x (relative change in volatility)

For all categories of this risk, banking institutions shall be required to calculate the capital charges as the change in relative value that is equal to ±25% of the implied volatility or the proportional shift in volatility of the options.

c) **The total capital charge** for Vega risk shall be the sum of the absolute values of the individual capital charges that have been calculated for Vega risk.

2. Scenario analysis method

a) Specific risk is calculated on net positions as defined in Annexure 6 (calculating net positions) and including the delta equivalent of options.

b) In calculating general market risk, banking institutions may apply "scenario-matrix" analysis to their options portfolios and associated hedging positions. In this case the options and their hedges are dissociated from the net positions calculated in Annexure 6 and 10 and11 (calculating net positions; Foreign Exchange Rate Risk and Commodities Risk). The choice of analysis must be communicated in advance to the *Bank*, which may prohibit its use.

c) The "scenario-matrix" analysis will be accomplished by specifying a fixed range of changes in the option portfolio's risk factors and calculating changes in the value of the option portfolio at various points along this "grid". For the purposes of calculating capital charges, banks will revalue the option portfolio using matrices for simultaneous changes in the option's underlying rate or price and in volatility of that rate or price.

Analyses must be based on the following principles:

A different matrix shall be set up or constructed for each underlying (category of instrument), namely:

(i) A separate matrix for each national market, for risk on equity securities and equity-market indexes;
(ii) A matrix for each currency pair and one for gold, for foreign-exchange risk;
(iii) A matrix for each currency and for each group of maturity bands (at least six groups), for interest-rate risk. A group of bands consists of at most three consecutive bands as defined in column 2, Table 13 of Annexure 8 (interest rate risk);
(iv) A matrix for each commodity, for commodity risk.

d) The options and related hedging positions will be evaluated over a specified range above and below the current value of the underlying. The range for interest rates is consistent with the assumed changes in yield in Table 13.

e) For those banking institutions using the alternative method (internal method approach) for interest rate options, set out above shall use, for each set of time band, the highest of the assumed changes in yield applicable to the group to which the time band belongs[38].

f) The rows of the matrices represent variations in the value of the underlying (solely with respect to general risk) and must satisfy the following conditions:

(i) The range of variation is ± 8% for equity securities and stock-market indexes;
(ii) The range of variation is ± 8% for foreign exchange and gold;
(iii) The range of variation in price is ± 15% for commodities;
(iv) The range of variation in interest rates for a group of maturity bands is equal to the largest assumed interest-rate change within the group in question;

[38] If for example, the time-bands 3 to 4 years, 4 to 5 years and 5 to 7 years are combined, the highest assumed change in yield of the three bands would be 0.75.

g) It should be noted that for all categories of risk, each band is divided into at least seven observations at identical intervals, including the current observation (for example, for commodities: - 15%, - 10%, - 5%, 0%, + 5%, + 10%, + 15%).

h) The second dimension or the columns of the matrix represent the relative variations in the volatility of the underlying rate or price. A single change in the volatility of the underlying rate or price equal to a shift in volatility of ± 25% is required to be sufficient in most cases. In each cell of the matrix, the portfolio is revalued in response to changes in the underlying and its volatility.

i) After calculating the matrix, each cell contains the net gain or loss in the value of the options and any associated hedges; the cell containing the largest loss will then be used to determine the capital requirement for the underlying associated with that matrix.

j) The application of the scenario analysis method by any specific banking institution will be subject to the consent of the *Bank*, particularly as regards the precise way that the analysis is constructed. Bank's use of this method as part of the standard methodology will also be subject to validation by the *Bank*, and to those of the qualitative standards listed in Annexure 12 (options risk) which are appropriate given the nature of the business.

k) Besides the options risks mentioned above, the *Bank* is conscious of the other risks also associated with options, e.g. rho (rate of change of the value of the option with respect to the interest rate). While not proposing a measurement system for those risks at present, it expects bankinginstitutions undertaking significant options business at the very least tomonitor such risks closely. Additionally, banking institutions will be permitted to incorporate rho into their capital calculations for interest rate risk, if they wish to do so.

l) Simplified method

Banking institutions that handle a limited range of purchased options only may use the simplified approach described below for specific combinations. If the portfolio consists of a long position on a call or put option, the capital requirement is the smaller of the following two amounts:

- The sum of the general risk and the specific risk (if any) calculated on the underlying;
- The value of the option; for items that are not marked to market (such as certain foreign exchange options), the book value may be used.

m) If the portfolio consists of:

i) A long spot position coupled with a long put position in one-to-one proportions; or

ii) A short spot position coupled with a long call position in one-to-one proportions, the capital requirement is equal to the sum of the capital requirements for general risk and specific risk (if any) calculated on the spot position, less the amount the intrinsic value of the option (if any), with a minimum of zero. The intrinsic value is the difference:

(aa) For a call, between the market value of the underlying and the strike price,

(bb) For a put, between the strike price and the market value of the underlying.

ANNEXURE 13: TREATMENT OF CREDIT DERIVATIVES IN THE TRADING BOOK

A banking institution must determine the capital to be held against credit derivative instruments in the trading book in accordance with this determination.

A banking institution must include in its trading book total-rate-of-return swaps, except those that have been transacted to hedge a banking book credit exposure in accordance with the requirements in the credit risk determination. A banking institution must include open short positions in credit derivatives in its trading book. The *Bank* may in writing exempt a banking institution from this requirement on a one-off approval basis.

1. Scope

1.1. This annexure applies to single name credit-default swaps, certain total-rate-of-return swaps, cash-funded credit-linked notes and first- and second to-default baskets. A banking institution that transacts more complex credit derivatives that fall outside the scope of this annexure must, prior to execution of a relevant credit derivative contract, obtain the *Bank's* written approval regarding the appropriate regulatory capital treatment for such transactions.

1.2. Where the *Bank* considers that a banking institution is undertaking significant credit derivative activity, as either a purchaser or seller of protection, such that large exposures and concentrations are a potential concern, the *Bank* may require that banking institution to adopt an alternative capital treatment to that described in this determination.

1.3. A banking institution may use either the standard method or, with *Bank's* approval, an internal model to measure the general market risk and specific risk charges on credit derivative positions in the trading book. This annexure outlines only the calculation of the capital charge for credit derivatives under the standard method. A banking institution that wishes to use an internal risk measurement model to generate the regulatory capital charge must obtain *Bank's* approval.

2. General principles – general market risk

2.1. A banking institution that uses the standard method must treat credit derivatives based on a single reference entity in the same way as interest rate-related derivatives for the purposes of calculating a general market risk capital charge. Each credit derivative instrument is broken down into a notional debt instrument, to reflect the interest rate or fee-paying leg (if regular fees are paid under the terms of the contract) and, where applicable, a position in the reference obligation.

2.2. A banking institution must include these positions in the maturity ladder applicable to the currency of the cash flows and report at their market values.

3. General principles – specific risk

3.1. Where the credit-event payment is defined as the par value of the reference obligation less its recovery value (i.e. the credit derivative is cash settled), a banking institution must report for specific risk purposes the par value of the reference obligation. Where the credit-event payment is defined as a fixed amount, the banking institution must report the fixed amount. Where there is payment of the par value of an obligation in exchange for its physical delivery, the banking institution must report the par value of the obligation. In the latter two cases, the amount reported must reflect a position in the reference entity with maturity equal to the term to maturity of the credit derivative.

4. General principles – counterparty risk

4.1. The risk-weights to be used in the calculation of the counterparty risk charge must be consistent with those used for calculating the capital requirements in the banking book under the standardized approach**.**

4.2. A banking institution undertaking particular types of credit derivative transaction in the trading book must calculate a counterparty risk charge using the Current Exposure Method. This method calculates the regulatory capital charge for counterparty risk as the sum of the mark-to-market value of the derivative (if positive) and a measure of future potential credit exposure, where the latter is based on an "add-on" factor that depends on the type and maturity of the derivative transaction.

5. Credit-default swaps

5.1. The protection buyer in a credit-default swap must enter into the maturity ladder a short position in a notional debt instrument, where regular interest or fee cash flows are to be paid, to reflect the general market risk associated with those cash flows. A specific risk capital charge must also be calculated on a short position in the reference entity.

5.2. The protection seller in a credit-default swap must enter into the maturity ladder a long position in a notional debt instrument, where regular interest or fee cash flows are to be received, to reflect the general market risk associated with those cash flows. A specific risk capital charge must also be calculated on the long position in the reference entity.

6. Total-rate-of-return swaps

6.1. The protection buyer in a total-rate-of-return swap must enter into the maturity ladder a position in a notional debt instrument, where regular interest or fee cash flows are to be exchanged, to reflect the general market risk associated with those cash flows. General market risk and specific risk capital charges must also be calculated on the short position in the reference obligation.

6.2. The protection seller in a total-rate-of-return swap must enter into the maturity ladder a position in a notional debt instrument, where regular interest or fee cash flows are to be exchanged, to reflect the general market risk associated with those cash flows. General market risk and specific risk capital charges must also be calculated on the long position in the reference obligation.

7. Cash-funded credit-linked notes

7.1. The protection buyer in a credit-linked note must enter into the maturity ladder a short position in the underlying interest rate instrument for general market risk purposes. A specific risk capital charge must also be calculated on the short position in the reference entity.

7.2. The protection seller in a credit-linked note must enter into the maturity ladder a long position in the underlying interest rate instrument for general market risk purposes. A specific risk capital charge must be calculated on the long position in the reference entity and the long position in the underlying interest rate instrument (i.e. the long position in the protection buyer).

8. First- and second-to-default basket credit derivatives

8.1. The protection buyer in a first- or second-to-default basket must enter into the maturity ladder a short position in a notional debt instrument, where regular interest or fee cash flows are to be paid, to reflect the general market risk associated with those cash flows. A specific risk capital charge must also be calculated on a short position in only one reference entity in the basket, with that entity being chosen by the banking institution.

8.2. The protection seller in a first- or second-to-default basket must enter into the maturity ladder a long position in a notional debt instrument, where regular interest or fee cash flows are to be received, to reflect the general market risk associated with those cash flows. Where a first-to-default or second-to-default basket product has an external credit assessment from an eligible credit assessment institution, a banking institution may set a specific risk charge applicable to a long position in an equivalently rated entity. Otherwise, a banking institution must calculate a specific risk capital charge for a first-to-default basket on the long positions in all reference entities in the basket, and for a second-to-default basket on the long positions in all reference entities in the basket, excluding the entity with the lowest specific risk in the basket. The amount of capital held may be capped at the maximum pay-out possible under the credit derivative contract.

9. Specific risk offsetting

9.1. Offsetting between credit derivatives

A banking institution may only offset the specific risk capital charges on equal and opposite credit derivative positions. Where the credit derivatives are equal and opposite in all respects other than tenor, the specific risk capital charges must not be offset. Instead, a single specific risk capital charge must be calculated, based on the reference entity.

The specific risk capital charges arising from different credit derivative product structures must not be offset.

9.2. Offsetting between a credit derivative and the associated underlying exposure

9.2.1. A banking institution may recognize the full allowance for offsetting when the values of two legs (i.e. long and short) always move in the opposite direction and broadly to the same extent. This occurs where:

a) the two legs consist of completely identical instruments; or

b) a long cash position is hedged by a total rate of return swap (or vice versa) and there is an exact match between the reference obligation and the underlying exposure (i.e. the cash position). In these cases, specific risk capital requirements do not apply to either side of the position.

9.2.2. A banking institution may recognize an offset of 80 per cent when the value of two legs (i.e. long and short) always moves in the opposite direction and there is an exact match in terms of the reference obligation, the maturity of both the reference obligation and the credit derivative, and the currency of the underlying exposure. In addition, key features of the credit derivative contract (e.g. credit event definitions, settlement mechanisms) must not

cause the price movement of the credit derivative to materially deviate from the price movements of the cash position. To the extent that the transaction transfers risk (i.e. taking account of restrictive pay-out provisions such as fixed pay-outs and materiality thresholds), an 80 per cent specific risk offset may be applied to the side of the transaction with the higher capital charge, while the specific risk requirement on the other side is zero.

9.2.3. A banking institution may recognize a partial offset when the value of the two legs (i.e. long and short) usually moves in the opposite direction. This occurs where:

a) the position is captured in paragraph 9.2.1(b), but there is an asset mismatch between the reference obligation and the underlying exposure; or

b) the position is captured in paragraphs 9.2.1(a) or 9.2.2 but there is a currency or maturity mismatch between the credit protection and the underlying asset; or

c) the position is captured in paragraph 9.2.2 but there is an asset mismatch between the cash position and the credit derivative. However, the underlying asset is included in the (deliverable) obligations in the credit derivative documentation.

9.2.4. Where an instrument complies with paragraphs 9.2.1, 9.2.2 or 9.2.3, rather than adding the specific risk capital requirements for each side of the transaction (i.e. the credit protection and the underlying asset), a banking institution may apply only the higher of the two capital requirements. Where an instrument does not comply with these paragraphs, the banking institution must assess a specific risk capital charge against both sides of the position.

9.2.5. A banking institution holding long positions in first-to-default and second-to-default products (e.g. buyers of basket credit-linked notes) is treated as if it were a protection seller and must add the specific risk charges or use the external rating if available. An issuer of these notes is treated as if it were a protection buyer and is therefore allowed to offset specific risk for one of the underlying assets, i.e. the asset with the lowest specific risk charge.

ANNEXURE 14: ELIGIBILITY CRITERIA FOR MDBs

Claims on Multilateral Development Banks shall be risk-weighted at 0% when the following eligibility criteria as set in the Basel II framework by the committee are satisfied

a) High quality long-term issuer ratings where an MDB's external assessment must be AAA;

b) Shareholder's structures must be comprised of a significant proportion of sovereigns with long-term issuer of credit assessments of AA- or better, or the majority of the MDB's fund raising are in the form of paid-in equity/ capital and there is little or no leverage;

c) Strong shareholders support demonstrated by the amount of paid-in capital contributed by the shareholders; the amount of further capital the MDBs have the right to call, if required, to repay their liabilities; and continue capital contributions and new pledges from sovereign shareholders.

d) Adequate level of capital and liquidity (a case by case is necessary in order to assess whether each MDB's capital and liquidity are adequate); and

e) Strict statutory lending requirements and conservative financial policies, which would include among others, the conditions of a structured approval process, internal creditworthiness and risk concentration limits (per country, sector, and individual exposure and credit category), large exposures approval by the board or a credit committee of the board, fixed repayment schedules, effective monitoring of use of proceeds, status review process and rigorous assessment of risk and provisioning to loan loss reserve.

ANNEXURE 15: GLOSSARY OF TERMS

"Additional Tier 1 Capital (AT1)" - includes instruments issued by the banking institution that are not included in CET1 Capital but which nevertheless do provide loss absorption on a going-concern basis.

"banking institutions "- means banking institutions and bank controlling company authorised under the Banking Institutions Act, 1998, as Amended (the Act) to conduct banking business, or deemed to be so authorised.

"Common Equity Tier 1 Capital (CET1)" - includes permanent shareholder's equity (issued and fully paid-up ordinary shares) plus disclosed reserves (additional paid-in share premium plus retained earnings/undistributed profits), audited interim profits, minority interest in consolidated subsidiaries of the banking institution.

"Domestic Systemically Important Banks" - means banking institutions that are critical for the uninterrupted availability of essential banking services to the country's real economy even during crisis. A few banking institutions assume systemic importance due to their size, cross-jurisdictional activities, complexity, lack of substitutability and interconnectedness. The disorderly failure of these banking institutions has the propensity to cause significant disruption to the essential services provided by the banking system, and in turn, to the overall economic activity.

"Tier 1 Capital (core or going concern[39])" - means the sum of Common Equity Tier 1 Capital and Additional Tier 1 Capital.

"Tier 2 Capital (gone concern[40])" - includes asset revaluation reserves; general loan loss provisions; subordinated debt and unaudited profits capital instruments.

"Total qualifying capital"- means the sum of Tier 1 capital and Tier 2 capital.

"**asset-backed commercial paper (ABCP) program"** – An asset-backed commercial program predominately issues commercial paper with an original maturity of one year or less that is backed by assets or other exposures held in a bankruptcy-remote, special purpose entity.

"banking book" – means all the banking institution's on-balance sheet assets and off-balance sheet exposures except such assets which are required to be recorded in the institution's trading book.

"calendar quarter", means a consecutive period of 3 calendar months ending on the last day of March, June, September or December.

"cash-flow water fall"- Refers to the prioritization of payments and allocation of loss arising from the underlying pool of securitisation exposures (distribution of pay-out to participants in the securitisation transactions depending on the positions that several investors hold in the transaction whether senior or subordinated that also determine the amount of losses that they will have to bear).

"central counterparty (CCP) is a clearing house that interposes itself between counter parties to contract traded in one or more financial markets, becoming a buyer to every seller and a seller to every buyer and thereby ensuring the future performance of open contracts.

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[39] 'Going-concern capital' refers to capital against which losses can be written off while a banking institution continues to operate. Going concern capital will also absorb losses should a banking institution ultimately fail

[40] 'Gone-concern capital' refers to capital that would not absorb losses until such time as a bank is wound up or the capital is otherwise written off or converted into ordinary shares.

"clean up call" – is an option that permits the securitisation exposures to be called before all the underlying exposures or securitisation exposures has been repaid. In the case of traditional securitisations, this is generally accomplished by repurchasing the remaining securitisation exposures once the pool balance or outstanding securities have fallen below some specified level. In the case of synthetic transaction, the clean-up call may take the form of a clause that extinguishes the credit protection.

"Clearing Member (CM)" is defined as in Annex 4, Section I, A. General Terms of the BCBS document International Convergence of Capital Measurement and Capital Standards: A Revised Framework – Comprehensive Version, June 2006 as amended.

"CM trade exposure" includes initial margin irrespective of whether or not it is posted in a manner that makes it remote from the insolvency of the CCP.

"collateralized transactions" means the transactions in which banking institutions have credit exposure or potential credit exposure, and that credit exposure or potential exposure is hedged in whole or in part by collateral posted by a counterparty or by a third party on behalf of the counterparty.

"commodity risk" - means the risk that potential for reduced income or losses in on- or off-balance sheet positions may arise from adverse movements on commodity prices.

"credit enhancement" – Is a contractual arrangement in which the banking institution retains or assumes a securitisation exposure and, in substance, provide some degree of added protection to other parties to the transaction**.**

"credit derivative" – means a financial instrument that allows participants to decouple credit risk from an asset and to place it with another party.

"credit equivalent" – in relation to off-balance sheet exposures means the value obtained by multiplying the principal amount of the of-balance sheet exposure, by the applicable credit conversion factor. The resultant credit equivalent amount is assigned to the appropriate risk category according to the nature of claims.

"credit-enhancing interest only strip" – is an on balance sheet asset that (i) represents a valuation of cash flows related to future margin income, and (ii) is subordinated.

"credit protection" – means the protection afforded to the exposure by the recognised credit risk mitigation.

"credit quality grade/assessment" – means grade or assessment represented by the symbols to which the credit assessment of an External Credit Assessment Institutions (ECAI) rating is mapped for the purpose of determining the appropriate risk-weight for an on-balance sheet asset or off-balance sheet exposure of banking institutions.

"credit-event payment" – the amount that is payable by the credit protection provider to the credit protection buyer under the terms of the credit derivative contract following the occurrence of a credit event. The payment can be in the form of physical settlement (payment of par in exchange for physical delivery of a deliverable obligation of the reference entity) or cash settlement (payment of a fixed amount, or payment of the par value of the reference obligation less that obligation's recovery value).

"credit events" – events affecting the reference entity that trigger a credit-event payment under the terms of the credit derivative contract.

"credit risk" – means the risk that arises from the potential that an obligor is either unwilling to perform on an obligation or its ability to perform such an obligation is impaired resulting in economic loss to the banking institution.

"debt security" – means all negotiable short and long term debt instruments, including NCD's, but excluding equity shares, investment funds and warrants. Further to this, NCD's can be classified as money market securities that are short-term, highly liquid, low risk debts of government, banking institutions or corporate.

"deliverable obligation" – any obligation of the reference entity that can be delivered, under the terms of the contract, if a credit event occurs. A deliverable obligation is relevant for credit derivatives that are to be physically settled.

"derivative exposure" means an approach which makes reference to the Current Exposure Method (CEM) which is used under the Basel II framework to calculate CCR exposure amounts associated with derivative exposures.

"early amortization provisions" - refers to mechanisms that, once triggered, allow investors to be paid out prior to the originally stated maturity of the securities issued.

"effective notional amount" means an amount is obtained by adjusting the notional amount to reflect the true exposure of contracts that are leveraged or otherwise enhanced by the structure of the transaction.

"eligible bilateral netting" means netting rules of the Basel II framework excepting the rules for cross-product netting (i.e. cross-product netting is not permitted in determining the leverage ratio exposure measure).

"equity position risk" – means the risk that potential for reduced income or losses in on- or off-balance sheet positions may arise from adverse changes in equity prices.

"excess spread" - refers to the deference between the cash flow paid by the obligor of the underlying exposures and the coupons paid on the security sold to investors, minus servicing fees, certificate interest and other expense relating to SPE.

"financial asset" – means the contractual right to receive cash or another financial asset or contractual right to exchange financial assets on potentially favourable terms or an equity instrument.

"financial liability" – means the contractual obligation to deliver cash or another financial asset or to exchange financial liabilities under conditions that are potentially unfavourable.

"foreign exchange rate risk" - means the risk that the value of foreign exchange positions may be adversely affected by changes in exchange rates.

"gross income", in relation to the calculation of a banking institution's operational risk using the "BIA or TSA", means the sum of the banking institution's net interest income and non-interest income before the deduction from any such income of -

(a) the operating expenses of the banking institution (including any fees paid / incurred for outsourcing services); and

(b) any general provisions and specific provisions made by the banking institution.

"gross SFT assets" for SFT assets subject to novation and cleared through QCCPs, "gross SFT assets recognised for accounting purposes" are replaced by the final contractual exposure, given that pre-existing contracts have been replaced by new legal obligations through the novation process.

"gross SFT assets recognised for accounting purposes" are Gross SFT assets recognised for accounting purposes must not recognise any accounting netting of cash payables against cash receivables (e.g. as currently permitted under the IFRS and US GAAP accounting frameworks). This regulatory treatment has the benefit of avoiding inconsistencies from netting which may arise across different accounting regimes.

"hair cut" – means an adjustment to be applied to the credit protection held by the banking institution, or the institution's exposure, to take into account possible future price fluctuations or fluctuations in exchange rates.

"implicit support"- the term refers to the wide range of mechanisms by which a banking institution provides non-contractual support to the holders of some securitisation exposures, usually once there is deterioration in the credit quality of the underlying pool of exposures**.**

"interest expenses", in relation to the calculation of a banking institution's operational risk, means the sum of -

(a) the interest paid by the banking institution on its interest-bearing liabilities; and

(b) the accrued interest payable by the banking institution on its interest bearing liabilities.

"interest bearing liabilities", is defined as total liabilities, excluding acceptances, trade creditors and taxation liabilities as well as capital and reserves.

"interest earning assets", is defined as interest earned from loans and advances, investments that generate interest income, before specific and general provisions.

"interest income", in relation to the calculation of a banking institution's operational risk, means the sum of –

a) the interest received by the banking institution on its interest-bearing assets; and

b) the accrued interest receivable by the banking institution on its interest bearing assets in respect of loans receivable and deposits.

"interest rate risk" – means the risk that potential loss in on- or off-balance sheet position diverse changes in interest rates.

"mark to market" – in relation to any transaction, contract or recognised credit risk mitigation, means the revaluation of the transaction, contract or recognised credit risk mitigation at current market rates.

"market risk" – means the risk of loss on on-balance sheet or off balance sheet positions arising from fluctuations in market prices and covers:

- The risk pertaining to interest related instruments and equities position in the trading book; and

- Foreign exchange risk and commodities risk arising from on- and off-balance sheet activities throughout the banking institution.

"Master Netting Agreement (MNA)" may be deemed to be a single MNA to the extent that the criteria in this paragraph include the term "master netting agreement", this term should be read as including any "netting agreement" that provides legally enforceable rights of offsets. This is to take account of the fact that for netting agreements employed by CCPs, no standardisation has currently emerged that would be comparable with respect to OTC netting agreements for bilateral trading.

"netting" – means the process whereby a person's long position in a financial instrument is off-set against that

a) person's short position in the financial instrument; and

b) that person's short position in a financial instrument is set-off against his long position in the financial instrument, in order to ascertain the net position of the person in question.

"net interest income", in relation to the calculation of a banking institution's operational risk, means the interest income of the banking institution after deducting the interest expenses.

"non-interest income", in relation to the calculation of a banking institution's operational risk -

a) subject to paragraph (b), means -

(i) income recognised by the banking institution from –

a. gains less losses arising from the banking institution's trading book (i.e. foreign currencies, exchange rate contracts, interest rate contracts, equity contracts, precious metal contracts, other commodity contracts, credit derivative contracts and securities);

b. dividends recognised by the banking institution from its shareholdings in other companies;

c. fees and commissions recognised by the banking institution (including any fees and commissions received by the banking institution from outsourcing of services); and

(ii) any other income (except interest income) arising in the ordinary course of the business of the banking institution.

b) Does not include –

(i) reversals of -

a. write-downs of inventories, property, plant and equipment of the banking institution; or

b. provisions for bad and doubtful debts of the banking institution;

(ii) income recognised by the banking institution from disposals of items of fixed assets (i.e. property, plant and equipment);

(iii) income recognised by the banking institution from disposals of non-trading investments;

(iv) extraordinary / irregular items (i.e. litigation settlements in favour of the banking institution); and

(v) income recognised from insurance claims for the benefit of the banking institution.

"operational risk", is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. The operational risk definition includes legal risk[41], but excludes strategic and reputational risk. It should be noted that it is not the intention of Pillar 1 capital charge to cover all indirect losses or opportunity costs.

"originating bank/banking institution" – a banking institution is considered originating with regard to certain securitisation if it meets either of the following conditions:

- The banking institution originates directly or indirectly underlying exposures included in the securitisation;

- The banking institution serves as a sponsor of an assets-backed commercial paper (ABCP) conduit or similar program that acquires exposures from third- party entities. In the context of such program, a banking institution would generally be considered a sponsor and, in turn, an originator if it, in fact or in substance, manages or advises the program, place securities into the market or provide liquidity and/or credit enhancement.

"past due exposure" – means an exposure which is overdue for more than 90 days or has been rescheduled. Overdraft facilities shall be considered as past due once the customer has breached an advised limit or been advised of limit smaller than current outstanding balance.

"qualifying central counterparty" (QCCP) - is an entity that is licensed to operate as a CCP (including a license granted by way of confirming an exemption), and permitted by the appropriate regulatory/overseer to operate as such with respect to the products offered. QCCP is also defined as in Annex 4, Section I, A. General Terms of the BCBS document International Convergence of Capital Measurement and Capital Standards: A Revised Framework – Comprehensive Version, June 2006 as amended.

"Qualifying MNA" means one that meets the requirements under paragraphs 12 and 13 of the Annex.

"reference entity" – the entity or entity whose obligations are used to determine whether a credit event has occurred under the terms of the credit derivative contract.

"reference obligation" – the obligation used to calculate the amount payable when a credit event occurs. A reference obligation is relevant for obligations that are to be cash settled (on a par less recovery basis).

"Replacement cost" means if, under a banking institution's national accounting standards, there is no accounting measure of exposure for certain derivative instruments because they are held (completely) off-balance sheet, the banking institution must use the sum of positive fair values of these derivatives as the replacement cost.

"rescheduled loans and advances" – means any loans and advances for which the banking institution has granted a concession to a borrower owing to deterioration in the borrower's financial condition. The rescheduling may include –

[41] Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory actions, as well as private settlements. The Bank will review the capital requirement produced by the operational risk standardised approach used by a banking institution for general credibility, especially in relation to peer banking institutions. In the event that credibility is lacking, appropriate regulatory enforcement action under Pillar 2 will be considered. If negative gross income distorts a banking institution's Pillar 1 capital charge, the Bank will consider appropriate supervisory action under Pillar 2 (Supervisory Review).

(i) a modification of terms from what have been originally agreed, for example, a reduction in interest rate, or lengthening of maturity, or differing of loan principal payment; and

(ii) the substitution or addition of new debtor for the original borrower.

"Same reference name" means two reference names that are considered identical only if they refer to the same legal entity. For single-name credit derivatives, protection purchased that references a subordinated position may offset protection sold on a more senior position of the same reference entity as long as a credit event on the senior reference asset would result in a credit event on the subordinated reference asset. Protection purchased on a pool of reference entities may offset protection sold on individual reference names if the protection purchased is economically equivalent to buying protection separately on each of the individual names in the pool (this would, for example, be the case if a banking institution were to purchase protection on an entire securitisation structure). If a banking institution purchases protection on a pool of reference names, but the credit protection does not cover the entire pool (i.e. the protection covers only a subset of the pool, as in the case of a Nth-to-default credit derivative or a securitisation tranche), then offsetting is not permitted for the protection sold on individual reference names. However, such purchased protections may offset sold protections on a pool provided the purchased protection covers the entirety of the subset of the pool on which protection has been sold. In other words, offsetting may only be recognised when the pool of reference entities and the level of subordination in both transactions are identical.

The effective notional amount of a written credit derivative may be reduced by any negative change in fair value reflected in the banking institution's Tier 1 capital provided the effective notional amount of the offsetting purchased credit protection is also reduced by any resulting positive change in fair value reflected in Tier 1 capital. Where a banking institution buys credit protection through a total return swap (TRS) and records the net payments received as net income, but does not record offsetting deterioration in the value of the written credit derivative (either through reductions in fair value or by an addition to reserves) reflected in Tier 1 capital, the credit protection will not be recognised for the purpose of offsetting the effective notional amounts related to written credit derivatives.

"securitisation" – means the process by which relatively homogenous pools of loans, originally made by a banking institution, are converted into tradable securities.

"Securities Financing Transaction (SFTs)" means transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and margin lending transactions, where the value of the transactions depends on the market valuations and the transactions are often subject to margin agreements.

"special purpose entity (SPE)" – An SPE is a corporation, trust, or other entity organized for a specific purpose, the activities of which are limited to those appropriate to accomplish the purpose of the SPE, and the structure of which is intended to isolate the SPE from the credit risk of an originator or seller of exposures. SPE are commonly used as financing vehicles in which exposures are sold to a trust or similar entity in exchange for cash or other assets funded by debt issued by the trust.

"specific and general risk"

(i) Specific and general risk includes the position risk on traded loan stock or securities (or derivatives thereof), which shall be divided into two components for purposes of calculating the capital requirements.

(ii) The first component shall be the specific risk component, that is, the risk of a price change in the underlying instrument owing to factors related to the issuer of the instrument, or, in the case of derivatives, the issuer of the underlying instrument.

(iii) The second component shall be the general risk component, that is, the risk of price change in the underlying instrument owing (in case of traded loan-stock instrument or loan-stock derivative) to a change in the level of interest rates or (in case of a security or security derivative) to a broad market movement unrelated to any specific attributes of the individual securities.

"spot mid-rate" – is an arithmetic mean of bid and offer prices expressed as a factor of the domestic currency equivalent, at which a foreign currency is converted to a domestic currency equivalent.

"synthetic securitisation" – means the one that involves the use of credit risk mitigation techniques to hedge the underlying exposures and where no legal or economic transfer of pool of loans or obligation by an originating institution to a third party is required.

"third-party banking institutions"- in the context of a securitisation, "third party banks/banking institution" refers to all banking institutions involved in the transaction other than the originating banking institution. This would include, for instance, banking institutions providing liquidity facilities or various forms of credit enhancements.

"traditional securitisation" – means the one that involves the legal or economic transfer of assets or obligation by an originating institutions to a third party, typically referred to as a **"Special Purpose Vehicles (SPV) ".** An SPV issues assets backed securities, which are claims against specific asset pool.

"trapping point"– refers to the point at which banking institutions are required by the transactions terms to start retaining or accumulating the excess spread for controlled or non-controlled early amortization features. It is an indicator that measures the variation in the credit quality of the underlying pool of exposures and the probability of early amortization (indicate that the excess spread may become inadequate at certain point in future to prevent an early amortization clause to be triggered).

"trading book" – Consist of 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 held intentionally for short-term resale and/or with the intent of benefiting from actual or expected short-term price movements or to lock in arbitrage profits, and may include for example proprietary positions, positions arising from client servicing and market making. 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 shall be frequently and accurately valued, and the portfolio shall be actively managed.

"underlying exposure" – the exposure which is being protected by the credit derivative.

"year" – in relation to the computation of a banking institution's gross income for the purposes of calculating the banking institution's operational risk capital charges, means a period of 4 consecutive calendar quarters.
