



INSTRUCTION NO.21/2023¹ ON REGULATORY CAPITAL AND LEVERAGE RATIO

Banco Central de Timor-Leste (BCTL) has the responsibility of regulating and supervising financial institutions as prescribed by Art. 5 (j) of Law no. 5/2011 of 14 June, on the Organic Law of the BCTL

Section 12 of Regulation 2000/8 on Bank Licensing and Supervision determines that the minimum amounts that banks must maintain as regulatory capital, and the minimum absolute amount of capital, shall be prescribed from time to time by instructions of the BCTL.

Section 23(2) of that referred Regulation also establishes that banks shall maintain adequate capital.

Section 26(1) of the referred Regulation mandates that banks shall observe the limits prescribed by the BCTL as the maximum ratios and exposures to be maintained by a bank concerning its assets, risk-weighted assets, and off-balance sheet items and various categories of capital and reserves.

Section 35(1) of the Regulation determines that each bank shall prepare and submit to the BCTL reports concerning its administration and operations, liquidity, solvency, and profitability, and those of its subsidiaries, that accurately reflect the financial condition of the bank and each of its subsidiaries on an individual and a consolidated basis. Reports must be prepared and presented, in the form and periods as determined by BCTL Instruction.

Section 46 of Regulation empowers the BCTL to issue instructions and guidelines, as deemed necessary or advisable to give effect to the provisions of that regulation.

The best international practices on banking supervision are defined by the Basel Committee on Banking Supervision (BCBS) and Principles 16 of the Core Principles for Effective Banking Supervision (Basel Core Principles) on Capital Adequacy recommends that supervisor sets prudent and appropriate capital adequacy requirements for banks, not less than the applicable Basel standards, that reflect the risks undertaken by, and presented by, a bank in the context of the markets and macroeconomic conditions in which it operates, defining the components of capital, bearing in mind their ability to absorb losses.

Taking into consideration the above referred best international practices and essential principles on capital adequacy set on the document *The Basel Framework, a full set of standards of the Basel committee on Banking Supervision (BCBS)*.

The Governing Board of Directors of Banco Central de Timor-Leste, in accordance with Section 46 of Regulation no. 2000/8 of 25 February and Article 31 paragraph 1 of Law no. 5/2011 of 15 June, hereby resolves to approve the following Instruction:

¹ Please refer to the Portuguese version for official use. This English version is prepared to facilitate the availability of information for the financial institutions.

Article 1
Objective and Scope

1. The objective of the present Instruction is to establish the minimum regulatory capital for banks licensed under Regulation 2000/8 of 25 February, the definition of elements that can integrate the regulatory capital of a bank and the capital adequacy ratio, which compares the capital to the credit, market, and operational risks of banks.
2. The Instruction also establishes the procedures to calculate the Credit Risk Weighted Assets, the Market Risk Weighted Assets and the Operational Risk Weighted Assets, required to determine the capital adequacy ratio.
3. Finally, the Instruction defines a capital buffer ratio, a countercyclical ratio, and a leverage ratio.
4. This Instruction applies to all Banks licensed to operate in Timor-Leste on both a solo as well as consolidated level, unless a higher minimum requirement for Regulatory Capital is established by the BCTL for an individual bank in a written enforcement agreement, in a written order to cease and desist, or as a condition for approval of an application.
5. Branches of foreign entities must follow their home country requirements if those standards are not less than the standards set by the Basel Committee on Banking Supervision. However, they shall disclose and report the compliance with the standards by the bank on a solo and a consolidated level.

Article 2
Definitions

Except when otherwise defined in the context, the terms used in this Instruction shall have the same meaning with those defined in Regulation no. 2000/8 of 25 February.

CHAPTER I
REGULATORY CAPITAL

Article 3
Minimum Amount of Regulatory Capital

1. Banks must maintain a minimum amount of Regulatory Capital according to the capital required for the level of license.
2. The regulatory capital determined in accordance with this Instruction cannot be less than the absolute amount of capital required for the level of license.
3. Branches of foreign banks must maintain the minimum amount of regulatory capital in Timor-Leste, or a guarantee accepted by the BCTL, provided that the capital of the bank is sufficient to satisfy the legal capital requirements of its home country supervisor.

Article 4
Regulatory Capital Adequacy Ratio

1. Banks are required to maintain a minimum regulatory capital adequacy ratio (CAR) of 10% on an on-going basis, considered prudent and appropriate to the risks undertaken by, and presented by, banks in the context of the present markets and macroeconomic conditions, and the ability to absorb losses.
2. The regulatory capital adequacy ratio is calculated in the following manner:

$\text{CAR} = \frac{\text{Regulatory Capital}}{\text{Total RWA (Credit RWA + Market RWA + Operational RWA)}}$

3. The ratio compares the Regulatory Capital, determined in accordance with this Instruction, to the Total Risk Weighted Assets (Total RWA), which is the sum of Risk Weighted Assets for Credit Risk, Market Risk and Operational Risk.
4. The procedures to determine the Credit Risk Weighted Assets, Market Risk Weighted Assets and Operational Risk Weighted Asset Capital Requirements are established in Chapters IV to VI of this Instruction.

Article 5
Elements of Capital

1. Total regulatory capital shall consist of the sum of the following elements:
 - a) Common Equity Tier 1 (CET1) (going-concern capital);
 - b) Additional Tier 1 (going-concern capital);
 - c) Tier 2 Capital (gone-concern capital).
2. For each of the three categories above, this Instruction prescribes a single set of criteria that instruments are required to meet before inclusion in the relevant category.
3. All elements above are net of the associated regulatory adjustments and are subject to the following restrictions:
 - a) Common Equity Tier 1 must be at least 5.5% of risk-weighted assets at all times.
 - b) Tier 1 Capital, the sum of Common Equity Tier 1 and Additional Tier 1, must be at least 7.0% of risk-weighted assets at all times.

Article 6
Common Equity Tier 1

1. Common Equity Tier 1 capital consists of the sum of the following elements:
 - a) Common shares issued by the bank that meet the criteria for classification as common shares for regulatory purposes (or the equivalent for non-joint stock companies);
 - b) Stock surplus (share premium) resulting from the issue of instruments included in Common Equity Tier 1;

- c) Retained earnings;
 - d) Accumulated other comprehensive income and other disclosed reserves; and
 - e) Regulatory adjustments applied in the calculation of Common Equity Tier 1.
2. Retained earnings and other comprehensive income include interim profit or loss if the bank has appropriate audit. Dividends are removed from Common Equity Tier 1 in accordance with accounting standards.
3. An instrument can be classified as Common Equity Tier 1 capital if meets all of the following criteria:
- a) Represents the most subordinated claim in liquidation of the bank;
 - b) Entitled to a claim on the residual assets that is proportional with its share of issued capital, after all senior claims have been repaid in liquidation; i.e., has an unlimited and variable claim, not a fixed or capped claim;
 - c) Principal is perpetual and never repaid outside of liquidation, setting aside discretionary repurchases or other means of effectively reducing capital as allowable under BCTL authorization and relevant law;
 - d) The bank 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 bank is unable to pay distributions that exceed the level of distributable items;
 - f) There are no circumstances under which the distributions are obligatory. Nonpayment 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 highest quality issued capital;
 - h) It is the issued capital that takes the first and proportionately greatest share of any losses as they occur. Within the highest quality capital, each instrument absorbs losses on a going concern basis proportionately and *pari passu* with all the others;
 - i) The paid in amount is recognized as equity capital (i.e., not recognized as a liability) for determining balance sheet if in insolvency;
 - j) The paid in amount is classified as equity under the relevant accounting standards;
 - k) It is directly issued and paid-in and the bank 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 or subject to any other arrangement that legally or economically enhances the seniority of the claim;

- m) It is only issued with the approval of the owners of the issuing bank;
- n) It is clearly and separately disclosed on the bank's balance sheet.

Article 7

Additional Tier 1 Capital

1. Additional Tier 1 capital consists of the sum of the following elements:
 - a). Instruments issued by the bank that meet the criteria for inclusion in Additional Tier 1 capital, and are not included in Common Equity Tier 1;
 - b). Stock surplus (share premium) resulting from the issue of instruments included in Additional Tier 1 capital; and
 - c). Regulatory adjustments applied in the calculation of Additional Tier 1 Capital Instruments issued by the bank that meet the Additional Tier 1 criteria.
2. To be included in Additional Tier 1 capital, an instrument issued by the bank must meet the following minimum set of criteria:
 - a) Issued and paid-in;
 - b) Subordinated to depositors, general creditors, and subordinated debt of the bank;
 - 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 bank creditors;
 - d) Is perpetual, i.e., there is no maturity date and 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, with BCTL prior approval;
 - f) Any repayment of principal must be with prior BCTL approval and banks should not assume or create market expectations that supervisory approval will be given;
 - g) The bank must always have full discretion to cancel distributions or payments of coupons or dividends and such cancellations shall not be considered an event of default;
 - h) Dividends 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 on the banking organization's credit standing;
 - j) Instruments classified as liabilities for accounting purposes must have a principal loss-absorption mechanism, converting the instrument to common shares to keep the Common Equity Tier 1 at a point of at least 6,5% or recognizing losses to the instrument, reducing the claim of the instrument in liquidation, the amount repaid when a call is exercised or the payment of dividends/coupon;

- k) The aggregate amount to be written down/converted for all instruments classified as liabilities for accounting purposes on breaching the trigger level must be at least the amount needed to immediately return the bank's Common Equity Tier 1 ratio to the trigger level or, if this is not possible, the full principal value of the instruments;
 - l) Neither the bank nor a related party over which the bank exercises control or significant influence can have purchased the instrument, nor can the bank directly or indirectly fund the instrument or the purchase of the instrument;
 - m) The instrument cannot have any features that hinder recapitalization, 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, proceeds must be immediately available without limitation to a single operating entity or to the holding company.
3. Stock surplus (i.e., share premium) that is not eligible for inclusion in Common Equity Tier 1, will only be permitted to be included in Additional Tier 1 capital if the shares giving rise to the stock surplus are permitted to be included in Additional Tier 1 capital.

Article 8

Tier 2 Capital

1. Tier 2 capital consists of the sum of the following elements:
 - a) Instruments issued by the bank that meet the criteria for inclusion in Tier 2 capital, and are not included in Tier 1 capital;
 - b) Stock surplus (share premium) resulting from the issue of instruments included in Tier 2 capital;
 - c) Certain loan loss provisions as specified below on paragraphs 5 and 6; and
 - d) Regulatory adjustments applied in the calculation of Tier 2 capital.
2. The objective of Tier 2 is to provide loss absorption on a gone-concern basis, i.e. when there is the possibility of the bank being liquidated or become insolvent..
3. Based on this objective, the minimum set of criteria for an instrument to meet in order to be included in Tier 2 capital is the following:
 - a) Issued and paid-in;
 - b) Subordinated to depositors and general creditors of the bank;
 - 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 bank creditors;
 - d) The minimum original maturity must be of at least five years; the recognition in regulatory capital in the remaining five years before maturity will be amortized on a straight-line basis; and 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 and with a previous BCTL approval;
 - f) The investor must have no rights to accelerate the repayment of future scheduled payments (coupon or principal), except in bankruptcy 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 organization's credit standing;
 - h) Neither the bank nor a related party over which the bank exercises control or significant influence can have purchased the instrument, nor can the bank directly or indirectly have funded the purchase of the instrument;
 - i) The terms and conditions must have a provision that requires, at the option of the BCTL, the instrument to be converted into common equity if the bank becomes non-viable or requires capital support from the public sector;
 - j) If the instrument is not issued out of an operating entity or the holding company in the consolidated group, proceeds must be immediately available without limitation to a single operating entity or the holding company in the consolidated group in a form which meets all of the other criteria for inclusion in Tier 2 capital.
4. Stock surplus (i.e., share premium) that are not eligible for inclusion in Tier 1 are permitted to be included in Tier 2 capital if the shares giving rise to the stock surplus are permitted to be included in Tier 2 capital.
 5. Loan-loss reserves held against future, presently unidentified losses are freely available to meet losses which subsequently materialize and therefore qualify for inclusion within Tier 2. Provisions ascribed to identified deterioration of particular assets or known liabilities, whether individual or grouped, should be excluded.
 6. The general loan-loss reserves eligible for inclusion in Tier 2 are limited to a maximum of 1.25% of credit risk-weighted assets calculated under the standardized approach set on Chapter IV.

Article 9
Capital Adjustments

1. Minority interest arising from the issue of common shares by a fully consolidated subsidiary of the bank may receive recognition in Common Equity Tier 1 by approval of BCTL.
2. The regulatory adjustments cited in the following paragraphs shall be applied to regulatory capital, in most cases in the calculation of Common Equity Tier 1.
3. Goodwill and all other intangibles must be deducted in the calculation of Common Equity Tier 1, and the full amount is to be deducted net of any associated deferred tax liability.
4. Deferred tax assets (DTAs) that rely on future profitability of the bank to be realized are to be deducted in the calculation of Common Equity Tier 1.
5. The amount of the cash flow hedge reserve that relates to the hedging of items that are not fair valued on the balance sheet shall be derecognized in the calculation of Common Equity Tier 1. This means that positive amounts should be deducted, and negative amounts should be added back.

6. The bank shall derecognize in the calculation of Common Equity Tier 1 any increase in equity capital resulting from a securitization transaction, such as that associated with expected future margin income resulting in a gain on sale that is recognized in regulatory capital.
7. All unrealized gains and losses that have resulted from changes in the fair value of liabilities that are due to changes in the bank's own credit risk shall be derecognized in the calculation of Common Equity Tier 1. In addition, with regard to derivative liabilities, the bank shall derecognize all accounting valuation adjustments arising from the bank's own credit risk. The offsetting between valuation adjustments arising from the bank's own credit risk and those arising from its counterparties' credit risk is not allowed.
8. Defined benefit pension fund liabilities, as included on the balance sheet, must be fully recognized in the calculation of Common Equity Tier 1, i.e. Common Equity Tier 1 cannot be increased through derecognizing these liabilities. For each defined benefit pension fund that is an asset on the balance sheet, the net asset on the balance sheet in respect of the plan or fund 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 derecognized under the relevant accounting standards. Assets in the fund to which the bank 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 bank.
9. All bank's investments in its own common shares, whether held directly or indirectly, shall be deducted in the calculation of Common Equity Tier 1. In addition, any own stock which the bank could be contractually obliged to purchase should be deducted in the calculation of Common Equity Tier 1.
10. Reciprocal cross holdings of capital that are designed to artificially inflate the capital position of banks shall be deducted in full. Banks must apply a "corresponding deduction approach" to such investments in the capital of other banks, 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 bank itself.
11. Investments in other financial institutions where the bank does not own more than 10% of the common share capital or that are significant but outside the scope of consolidation must also be deducted from regulatory capital.
12. The BCTL can prescribe other regulatory adjustments to a bank or all banks if within the scope of this Instruction.

**CHAPTER II
CAPITAL BUFFERS**

**Section I
Capital Conservation Buffer**

**Article 10
Capital Conservation Best Practice**

1. Outside periods of stress, banks shall build up capital buffers above the regulatory minimum, which can be drawn down as losses are incurred. When buffers have been drawn down, banks shall look to rebuild them through reducing discretionary distributions of earnings or raising new capital from the private sector.
2. Banks which have depleted their capital buffers are not permitted to use future predictions of recovery as justification for maintaining generous distributions to shareholders, other capital providers and employees.
3. Banks which have depleted their capital buffers shall not try or use the distribution of capital as a way to signal their financial strength.
4. In order to reduce the discretion of banks which have depleted their capital buffers to further reduce them through distributions of earnings, banks shall comply with the dispositions of this Chapter.
5. Banks shall have the policy of retaining a greater proportion of earnings during a downturn to ensure that capital remains available to support the ongoing business operations of banks through the period of stress.

**Article 11
Capital Conservation Buffer**

1. A capital conservation buffer of 2,5% of the Weighted Risk Assets, comprised of Common Equity Tier 1, is established above the regulatory minimum capital requirement, designed to avoid breaches of minimum capital requirements on a individual or consolidated basis.
2. Capital distribution constraints shall be imposed on a bank when capital levels fall within this range. Banks will be able to conduct business as normal when their capital levels fall into the conservation range as they experience losses; however, distributions shall be constrained. The BCTL can establish level constraints imposed only to distributions, not the operation of the bank.
3. The distribution constraints imposed on banks when their capital levels fall into the range increase as the banks' capital levels approach the minimum requirements. By design, the constraints imposed on banks with capital levels at the top of the range would be minimal. This reflects an expectation that banks' capital levels will from time to time fall into this range.
4. The table below shows the minimum capital conservation standards a bank must meet at various levels of the Common Equity Tier 1 (CET1) capital ratios as a percentage of earnings that must be retained and not distributed.

Individual bank minimum capital conservation standards	
Common Equity Tier 1 Ratio	Minimum Capital Conservation Ratios (expressed as a percentage of earnings)

5.5% - 6.125%	100%
>6.125% - 6.75%	80%
>6.75% - 7.375%	60%
>7.375% - 8.0%	40%
> 8.0%	0%

5. Items considered to be distributions include dividends and share buybacks, discretionary payments on other Tier 1 capital instruments and discretionary bonus payments to staff.
6. 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 is reversed out.
7. Where a bank does not have positive earnings and has a Common Equity Tier 1 ratio less than 8%, it is restricted from making positive net distributions.
8. This framework shall be applied at the consolidated level, i.e., restrictions would be imposed on distributions out of the consolidated group.
9. The BCTL has the additional discretion to impose time limits on a bank operating within the buffer range on a case-by-case basis and shall ensure that the capital plans of the bank seek to rebuild buffers over an appropriate timeframe.

Article 12
Frequency of Calculation and Disclosure

Banks must ensure that the capital conservation buffer is calculated and publicly disclosed as part of their minimum capital requirements.

Section II
Countercyclical Buffer

Article 13
Countercyclical Buffer

1. Considering that losses incurred by a bank (or the banking sector) can be extremely large when a downturn is preceded by a period of excess credit growth, banks shall build up additional capital defenses in periods where the risks of system-wide stress are growing markedly.
2. Banks are required to build a countercyclical buffer aiming to ensure that banking sector capital requirements take account of the macro-financial environment in which they operate. It will be deployed by BCTL when excess aggregate credit growth is judged to be associated with a build-up of system-wide risk to ensure the banking system has a buffer of capital to protect it against future potential losses.
3. The buffer for internationally active banks will be a weighted average of the buffers deployed across all the jurisdictions to which it has credit exposures.
4. The countercyclical buffer regime consists of the following elements:

- a) BCTL will monitor credit growth and other indicators that may signal a buildup of system-wide risk and make assessments of whether credit growth is excessive and is leading to the buildup of system-wide risk. Based on this assessment, BCTL shall put in place a countercyclical buffer requirement when circumstances warrant. This requirement will be released when system-wide risk crystallizes or dissipates;
 - b) The countercyclical buffer requirement to which a bank is subject will extend the size of the capital conservation buffer. Banks will be subject to restrictions on distributions if they do not meet the requirement.
5. To give banks time to adjust to a buffer level, BCTL will pre-announce its decision to raise the level of the countercyclical buffer by up to 12 months. Decisions to decrease the level of the countercyclical buffer will take effect immediately.
 6. Banks will be subject to a countercyclical buffer that varies between zero and 2.5% to total risk weighted assets.
 7. BCTL initially sets the countercyclical buffer at 1,0% to total risk weighted assets.
 8. Banks must meet this buffer with Common Equity Tier 1 or other fully loss absorbing capital or be subject to the restrictions on distributions.
 9. Internationally active banks will look at the geographic location of their private sector credit exposures and calculate their countercyclical capital buffer requirement as a weighted average of the buffers that are being applied in jurisdictions to which they have an exposure.
 10. The countercyclical buffer requirement to which a bank is subject is implemented through an extension of the capital conservation buffer described in Section I of this Chapter.
 11. The table below shows the minimum capital conservation ratios a bank must meet at various levels of the Common Equity Tier 1 capital ratio. When the countercyclical capital buffer is zero, the capital levels and restrictions set out in the table are the same as those set out in Section I above.

Individual bank minimum capital conservation standards	
Common Equity Tier 1 (including other fully loss absorbing capital)	Minimum Capital Conservation Ratios (expressed as a percentage of earnings)
Within first quartile of buffer	100%
Within second quartile of buffer	80%
Within third quartile of buffer	60%
Within fourth quartile of buffer	40%
Above top of buffer	0%

Article 14 Frequency of Calculation and Disclosure

1. Banks must ensure that their countercyclical buffer requirements are calculated and publicly disclosed with at least the same frequency as their minimum capital requirements.
2. The buffer shall be based on the latest countercyclical buffer that are available at the date that banks calculate their minimum capital requirement.

3. In addition, when disclosing their buffer requirement, banks must also disclose the geographic breakdown of their private sector credit exposures used in the calculation of the buffer requirement.

CHAPTER III LEVERAGE RATIO

Article 15 Leverage Ratio

1. The leverage ratio is a simple, transparent, non-risk-based ratio that is calibrated to act as a credible supplementary measure to the risk-based capital requirements.
2. The leverage ratio is intended to achieve the following objectives:
 - a) restrict the build-up of leverage in the banking sector to avoid destabilizing deleveraging processes that can damage the broader financial system and the economy; and
 - b) reinforce the risk-based requirements with a simple, non-risk based “backstop” measure.

Article 16 Definition and Calculation of the Leverage Ratio

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

Leverage Ratio=	$\frac{\text{Capital measure}}{\text{Exposure measure}}$
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2. The capital measure for the leverage ratio is Tier 1 capital – comprising Common Equity Tier 1 and/or Additional Tier 1 instruments – as defined in this Instruction, after regulatory adjustments.
3. The exposure measure for the leverage ratio is the sum of on-balance sheet exposures, derivative exposures, securities financing transaction exposures and off-balance sheet items, as defined in the following paragraphs.
4. Both the capital measure and the exposure measure are to be calculated on a quarter-end basis.
5. Banks must meet a 3% leverage ratio minimum requirement at all times.
6. The exposure measure for the leverage ratio shall follow the accounting measure of exposure, observing that:
 - a) on-balance sheet, non-derivative exposures are net of specific provisions and valuation adjustments;
 - b) physical or financial collateral, guarantees or other methods of credit risk mitigation purchased is not allowed to reduce on-balance sheet exposures; and
 - c) netting of loans and deposits is not allowed.

7. A bank shall include all balance sheet assets in the exposure measure, including on-balance sheet derivatives collateral and collateral for securities financing transactions.
8. Items that are deducted completely from capital do not contribute to leverage and should therefore also be deducted from the measure of exposure. That is, the capital and exposure should be measured consistently and should avoid double counting. The deductions from Tier 1 capital should also be made from the exposure measure.
9. Liability items must not be deducted from the measure of exposure.
10. Securities Financing Transactions (SFT), such as repurchase agreements, are a form of secured funding and therefore an important source of balance sheet leverage that shall be included in the leverage ratio.
11. For a bank acting as principal, the gross SFT assets shall be included as recognized for accounting purposes, excluding from the exposure measure the value of any securities received under an SFT, where the bank has recognized the securities as an asset on its balance sheet. The netting mechanism will not be admitted.
12. A bank 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. The difference in values rather than to the full exposure to the underlying security or cash of the transaction shall be considered.
13. Derivatives create two types of exposure: an “on-balance sheet” present value reflecting the fair value of the contract (often zero at outset but subsequently positive or negative depending on the performance of the contract), and a notional economic exposure representing the underlying economic interest of the contract.
14. A bank shall calculate the derivative exposures, including where a bank sells protection using a credit derivative, for the purposes of the leverage ratio as the replacement cost plus an add-on for potential future exposure using the following table, based on the remaining maturity, to the notional economic exposure.

Add-on factors applied to financial derivatives, based on residual maturity					
	Interest rates	Foreign exchange and gold	Equities	Precious metal except gold	Other commodities
One year or less	0,0%	1,0%	6,0%	7,0%	10,0%
Over one to five years	0,5%	5,0%	8,0%	7,0%	12,0%
Over five years	1,5%	7,5%	10,0%	8,0%	15,0%

15. The replacement cost of the contract is obtained by marking to market, where the contract has a positive value; and the “add on” is calculated by applying the add-on factor referring in paragraph 14 to the notional principal amount of the derivative.

16. The following add-on factors apply to credit derivatives (total return swaps and credit default swaps): 5% for qualifying (investment grade) reference obligation and 10 % for non-qualifying reference obligation. There will be no difference depending on residual maturity.
17. The protection seller of a credit default swap shall only be subject to the add-on factor where it is subject to closeout upon the insolvency of the protection buyer while the underlying is still solvent. The add-on should then be capped to the amount of unpaid premiums.
18. If the derivative exposure is covered by an eligible bilateral netting contract satisfying the conditions for netting specified in the Annex III, the replacement cost for the set of derivative exposures covered by the contract will be the net replacement cost and the add-on based on the notional underlying principal.
19. The add-on for netted transactions (A_{Net}) will equal the weighted average of the gross add-on (A_{Gross}) and the gross add-on adjusted by the ratio of net current replacement cost to gross current replacement cost (NGR), expressed through the following formula: $A_{Net} = 0,4 \times A_{Gross} + 0,6 \times NGR \times A_{Gross}$.
20. Off-balance sheet (OBS) items include commitments (including liquidity facilities), unconditionally cancellable commitments, direct credit substitutes, acceptances, standby letters of credit, trade letters of credit, failed transactions and unsettled securities.
21. These OBS commitments other than securitization liquidity facilities with an original maturity up to one year and commitments with an original maturity over one year will receive a Credit Conversion Factor (CCF) of 20% and 50%, respectively, applied to the notional amount.
22. For any commitments that are unconditionally cancellable at any time by the bank without prior notice, the bank should apply a Credit Conversion Factor (CCF) of 10%.
23. Direct credit substitutes, e.g., general guarantees of indebtedness, including standby letters of credit serving as financial guarantees for loans and securities, and acceptances, including endorsements with the character of acceptances, will receive a Credit Conversion Factor (CCF) of 100%.
24. Forward asset purchases, or other transactions, which represent commitments with certain drawdown, will receive a CCF of 100%.
25. Note issuance facilities and revolving underwriting facilities will receive a CCF of 50%.
26. For short-term self-liquidating trade letters of credit arising from the movement of goods (e.g., documentary credits collateralized by the underlying shipment), a 20% CCF will be applied to both issuing and confirming banks.
27. All off-balance sheet securitization exposures, except an eligible liquidity facility or an eligible cash advance facility, will receive a CCF of 100%. All eligible liquidity facilities will receive a CCF of 50%.

Article 17
Frequency of Calculation and Disclosure

Banks must ensure that they observe the leverage ratio all the time and the ratio shall be publicly disclosed with at least the same frequency as their financial minimum capital requirements.

CHAPTER IV
CREDIT RISK WEIGHTED ASSETS

Article 18
Approach

1. Banks must calculate the risk-based capital requirements for Credit Risk using the Standardized Approach prescribed by the BCBS, which assigns standardized risk weights to credit risk exposures.
2. Risk weighted assets (RWA) are calculated as the product of the standardized risk weights and the exposure amount.
3. Banks shall use to determine the risk weights assessment by external credit assessment institutions (ECAIs), recognized by BCTL, as defined in the article 15, and the rules of this Chapter.
4. Banks must perform due diligence, appropriate to the size and complexity of their activities, to ensure that they have an adequate understanding, at origination and thereafter on a regular basis, of the risk profile and characteristics of their counterparties.
5. Banks must take reasonable and adequate steps to assess the operating and financial performance levels and trends through internal credit analysis and/or other analytics outsourced to a third party, as appropriate for each counterparty.
6. Banks shall have in place effective internal policies, processes, systems, and controls to ensure that the appropriate risk weights are assigned to counterparties.

Article 19
External Credit Assessment

1. In determining the risk weights in the standardized approach, banks may use assessments by External Credit Assessment Institutions (ECAIs) recognized by BCTL.
2. The notations used in the present Instruction follow the methodology used by one institution, Standard & Poor's (S&P). The use of S&P credit ratings is an example only. While most entities in Timor-Leste are unrated and no local ECAI has yet been established, the BCTL can recognize other external credit assessment institutions, setting the correspondence of used notation and the classes of risk.
3. A bank shall use its chosen ECAIs and their external credit assessments consistently for each type of exposure, for both risk weighting and risk management purposes. A bank shall not "cherry-pick" the assessments provided by different ECAIs.
4. Where a bank has two external credit assessments which map into different credit quality grades, it shall assign the exposure to the credit rating associated with the higher risk weight.

5. Banks should use only solicited rating from the chosen ECAI. A rating would be treated as solicited only if the issuer of the instrument has requested the ECAI for the rating and has accepted the rating assigned by the agency.
6. Where an exposure has an issue-specific external credit assessment, a bank shall use such assessment.
7. When the exposure or the issuer do not have a rate, the exposure is classified as “unrated”.
8. A bank shall not recognize the effects of Credit Risk Mitigants (CRM) if such CRM is already reflected in the issued specific external credit assessment of the exposure.

Article 20
Criteria for Calculation

1. For the purpose of this Chapter, a bank shall consider all on-balance sheet and off-balance sheet exposures in the banking book, except where such exposures are required to be deducted from bank’s capital.
2. Exposures shall be risk-weighted net of specific allowances or provisions.
3. A bank’s exposure to counterparties under over-the-counter (OTC) derivative contracts, credit derivative contracts or repo-style transactions booked in its trading book is also subjected to credit risk capital charge under standardized approach.
4. A credit assessment that refers to an item denominated in the borrower’s domestic currency cannot be used to derive a risk weight for another exposure to that same borrower that is denominated in a foreign currency. Domestic currency ratings, if separate, can only be used to risk weight claims denominated in the domestic currency.

Article 21
Classification of Exposures and Risk Weight Determination

1. A bank shall classify each of its on-balance sheet exposures, according to the nature of the exposure, as described and defined in Annex I.
2. The classification of the bank’s off-balance sheet items shall be done in accordance with the Annex II.
3. Banks may use several techniques to mitigate the credit risks to which they are exposed. The framework in Annex III sets out the principles for the recognition of Credit Risk Mitigation (CRM) techniques that a bank may use under the Standardized Approach to Credit Risk for the purpose of calculating its capital requirements and it is applicable to the banking book exposures.
4. The treatment of securitization exposures and the requirements to calculate risk-weighted assets for securitization exposures in the banking book are addressed in the Annex IV and the exposures to the counterparties credit risk, which applies to the trading book, are object of the Annex V.

CHAPTER V
MARKET RISK WEIGHTED ASSETS

Article 22
Definitions

1. The specific terms used for market risk will be defined as follows:
 - a) Banking book is the bank's on-balance sheet exposure and off-balance sheet exposure except those falling under the scope of trading book;
 - b) Fair value is the amount for which the asset can be exchanged between knowledgeable and willing parties in an arm's length transaction;
 - c) Forward contract is a contract between two parties for a purchase or sale of a specified amount of commodity, currency, financial instrument or things at a future date at an agreed price;
 - d) Interest rate instruments is a financial instrument whose value can be determined with reference to a current or specified interest rate.
 - e) Mark-to-market means to revalue a transaction, position, exposure or contract at current market value, including exchange prices, screen prices or quotes from several independent reputable brokers ;
 - f) Repo-style transaction represents a transaction carried by two counterparties whereby one party agrees to sell (buy) securities to (from) the other party for specified amount of money (at certain rate of interest) with a commitment to buy back (sell) the securities at an agreed price at a future date. It represents a transaction for collateralized borrowing/lending;
 - g) Trading book means all positions in financial instruments and commodities held by an institution either with trading intent, or in order to hedge positions held with trading intent, including proprietary positions and positions arising from client servicing, positions intended to be resold short term and positions to benefit from price differences between buying and selling prices;
 - h) Underlying asset represents an on-balance sheet or off-balance sheet exposure (in the form of a financial instrument as securities or loans) of a bank whose risk is being transferred under a derivative;
 - i) Financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. Financial instruments include both primary financial instruments (or cash instruments) and derivative financial instruments;
 - j) Hedge is the processes of counterbalancing risks from exposure to long and short positions in correlated instruments;
 - k) Instrument is the terms used to describe financial instruments and commodities, as oil and electric power;
 - l) Interest rate risk in the banking book means the exposure of a bank's financial condition to adverse movements in interest rates stemming from banking book assets and liabilities;

- m) Market risk is the risks of losses in on- and off-balance sheet risk positions arising from movements in market prices, including exchange rates and commodity prices;
- n) Notional value of a derivative instrument is equal to the number of units underlying the instrument, multiplied by the current market value of each unit;
- o) Risk position is a conceptual construct that represents a particular aspect of risk associated with a transaction within the standardized approach for market risk.

Article 23
Approach

- 1. Banks must calculate the amount of the Market Risk capital requirements and the equivalent Risk Weighted Assets to determine the ratios of Regulatory Capital according to the Article 4 of Chapter I of this Instruction.
- 2. To satisfy the paragraph 1, banks shall use the approach set by this Chapter.

Article 24
Market Risk Weighted Assets

- 1. Market risk capital requirement includes:
 - a) Interest rate risk;
 - b) Equity position risk;
 - c) Foreign exchange risk; and
 - d) Commodity risk.
- 2. Market Risk Capital Requirement (MRCR) applies on the following positions:
 - a) interest rate instruments and equity instruments in the trading book;
 - b) foreign exchange instruments and commodities on the trading and the banking books.
- 3. The MRCR will be the measures of the capital requirements for each relevant category, i.e., interest-rate-related instruments, equities, foreign exchange and commodities, including options and derivatives, as future contracts, forwards, and swaps, obtained in accordance with the Sections I to VI of Annex VI, summed arithmetically.
- 4. After the bank determine the MRCR, it shall calculate the equivalent Market Risk Weighted Assets (MRWA), which will be added to the Total Risk Weighted Assets of the Capital Adequacy Ratio defined in Article 4 of Chapter I of this Instruction, using the formula:

$\text{Market RWA} = 10 \times \text{MRCR}$

CHAPTER VI OPERATIONAL RISK WEIGHTED ASSETS

Article 25 Objective and Scope

1. Operational risk is inherent in all banking products, activities, processes and systems and banks shall maintain effective capital to handle the operational risk and to ensure an ability to operate on an ongoing basis.
2. Operational risk is defined as the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. This definition includes legal risk but excludes strategic and reputational risk.
3. Legal risk includes, but is not limited to, exposure to fines, penalties, or punitive damages resulting from supervisory or administrative actions, as well as private settlements.
4. The objective of this Chapter is to establish the procedures to calculate the minimum Operational Risk capital requirement and the equivalent Risk Weighted Assets, required to determine the bank's capital adequacy ratio and other ratios defined by this Instruction.

Article 26 Approach

1. Banks must calculate the amount of the Operational Risk capital requirement and the equivalent Risk Weighted Assets to determine the ratios of Regulatory Capital according to this Instruction.
2. In order to satisfy the paragraph 1, banks shall use the approach prescribed by the present Instruction.
3. Banks shall use the Basic Indicator Approach for measuring minimum operational risk capital requirements, however BCTL will move along the spectrum of available approaches as the banking system develop more sophisticated operational risk measurement systems and practices.

Article 27 The Basic Indicator Approach

1. Banks using the Basic Indicator Approach must hold capital for operational risk equal to a fixed percentage (15%) of the average of the positive annual gross income over the previous three years.
2. Figures for any year in which annual gross income is negative or zero should be excluded from both the numerator and denominator when calculating the average.
3. Where an institution has been in operation for less than three years it may use forward-looking business estimates in calculating the relevant indicator, provided that it starts using historical data as soon as it is available.
4. The capital requirement under the Basic Indicator Approach, *K_{bia}*, may be expressed as follows:

$$K_{bia} = \sum(GI_{1..n} \times 15\%) / n$$

Where:

GI is annual gross income, where positive, over the previous three years; and
n is the number of the previous three years for which gross income is positive

5. Gross income is defined as net interest income plus net non-interest income, according to accounting standards. It is intended that this measure should:

- a) be gross of any provisions (e.g., for unpaid interest);
- b) be gross of operating expenses, including fees paid to outsourcing service providers;
- c) exclude realized profits / losses from the sale of securities in the banking book; and
- d) exclude extraordinary or irregular items as well as income derived from insurance.

6. Under this approach banks are encouraged to comply with the Basel Committee's guidance on Principles for the Sound Management of Operational Risk, June 2011. In special, the board of directors and senior management, as appropriate, shall be actively involved in the oversight of the operational risk management framework and the bank has an operational risk management system that is conceptually sound and is implemented with integrity.

Article 28

Capital Requirements and Risk-Weighted Assets

The risk-weighted assets (RWA) for operational risk under the Basic Indicator Approach are determined by multiplying the capital requirements calculated as set out in the above Article 27 by 10.

CHAPTER VII FINAL DISPOSITIONS

Article 29

Restrictions on Capital Distribution

1. A bank shall not make a capital distribution, as defined in Section 49(f) of Regulation No. 2000/8, if the bank does not, or will not after making the distribution, have satisfactory minimum required amount of Regulatory Capital or minimum Capital Adequacy Ratio.
2. When the bank is working within the capital conservation buffer and/or the countercyclical capital, the restriction established by this pertinent Chapters of this Instruction shall be applied.
3. When a bank has a leverage ratio below 3%, the bank shall submit a plan to adjust its financial structure and restrict distributions in full.

Article 30
Reporting Requirements

1. Each bank shall submit to the BCTL a report as of each quarterly-end and in the format prescribed by the BCTL showing the calculation of Regulatory Capital, CET1, Tier 1 Capital, and Credit, Market and Operational Risk-Weighted Assets, , the Capital Adequacy Ratio, the capital conservation buffer, the countercyclical capital and the leverage ratio in accordance with this Instruction as the templates reporting attached on Annex VII.
2. Each bank shall prepare by the end of the financial year an ICAAP – Internal Capital Adequacy Assessment Report to be forwarded to the BCTL with the annual reports.
3. The BCTL is responsible for issuing guidelines and directives on the application of the previous paragraphs.

Article 31
Compliance with Capital Requirements

1. If an institution does not comply, or anticipates not complying, with the capital requirements set out in this Instruction, it shall immediately notify BCTL and submit, without undue delay, a plan to restore compliance with the capital requirements in a timely manner.
2. The BCTL monitors and controls the application of the recovery plan and requires a faster recovery, if applicable.
3. The BCTL may consider relevant risk factors, and each bank's internal capital adequacy assessment, to ensure that the capital held by the bank is adequate for the bank's overall risk profile. This includes, among other factors, the effectiveness of the bank's risk management systems in identifying, assessing, and measuring, monitoring and managing the various risks, including interest rate risk in the banking book, liquidity risk, concentration risk and risk residual. As a result, BCTL may adopt appropriate corrective measures under Regulation 2000/8 on Licensing and Supervision of Banks.

Article 32
Repealing and Entry into Force

1. Instruction CPO/B-2000/02, dated of 26 October 2000 on Regulatory Capital is hereby repealed.
2. This Instruction shall enter into force on the day of its publication in the *Jornal da República* however, banks shall report in compliance with this Instruction starting with the position of June 30, 2024.
3. Banks shall continue to report in accordance with the revoked Instruction until June 2024.

Approved on 4 July 2023

The Governor

Abraão de Vasconcelos

ANNEX I: CLASSIFICATION OF EXPOSURES AND CREDIT RISK WEIGHT DETERMINATION

Article 1 Classification

A bank shall classify each of its exposures, according to nature of the exposure, into one of the following classes:

- 1) Exposures to central governments or central banks;
- 2) Exposures to public sector entities;
- 3) Exposures to multilateral development banks;
- 4) Exposures to banks and supervised institutions;
- 5) Exposures to corporate and other persons;
- 6) Regulatory retail portfolio;
- 7) Exposures secured by mortgages on residential properties;
- 8) Exposures secured by mortgages on commercial real estates;
- 9) Exposures in default;
- 10) High risk exposures;
- 11) Unsettled and failed transactions;
- 12) Other exposures.

Article 2 Exposures to Central Governments or Central Banks

1. Instead of ECAs, banks may choose to use the risk scores published by individual ECAs participating in the “Arrangement on Officially Supported Export Credits”, the Organization for Economic Cooperation and Development (OECD)-agreed methodology, which establishes eight risk score categories associated with minimum export insurance premiums, for exposures to central governments or central banks.
2. The table below has both classifications, the ECAI and the OCDE scores:

Table 1: Risk Weights for Central Governments & Central Banks

Credit rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
OECD risk scores	0 to 1	2	3	4 to 6	7	
Risk weight	0%	20%	50%	100%	150%	100%

3. Notwithstanding the provisions of paragraph 1, a risk weight of 0% shall be assigned to the exposures of the Government of Timor-Leste and the BCTL or instruments issued by other entities backed by express guarantee of the Government of Timor-Leste, when the exposures are in US dollar.
4. Exposures to the Bank for International Settlements, the International Monetary Fund, the European Central Bank and the European Union may receive a 0% risk weight.

Article 3
Exposures to Public Sector Entities

1. Exposures to domestic Public Sector Entities (PSEs) shall be assigned a risk weight of 100% regardless of the length of the residual maturities of the exposures. Public sector entities include both commercial and non-commercial entities owned by government.
2. The exposure on a foreign PSE shall be risk weighted according to the credit rating grade applicable to the jurisdiction where the PSE is located.
3. Exposures to regional and local government shall also be assigned a risk weight of 100%.

Article 4
Exposures to Multilateral Development Banks

1. A Multilateral Development Bank (MDB) is an institution, created by a group of countries, that provides financing and professional advice for economic and social development projects. Each MDB has its own independent legal and operational status, but with a similar mandate and a considerable number of joint owners.
2. MDBs eligible for a 0% risk weight are: the World Bank Group comprising the International Bank for Reconstruction and Development (IBRD), the International Finance Corporation (IFC), the Multilateral Investment Guarantee Agency (MIGA) and the International Development Association (IDA), the Asian Development Bank (ADB), the African Development Bank (AfDB), the European Bank for Reconstruction and Development (EBRD), the Inter-American Development Bank (IADB), the European Investment Bank (EIB), the European Investment Fund (EIF), the Nordic Investment Bank (NIB), the Caribbean Development Bank (CDB), the Islamic Development Bank (IDB), the Council of Europe Development Bank (CEDB), the International Finance Facility for Immunization (IFFIm), and the Asian Infrastructure Investment Bank (AIIB).
3. For exposures to all other MDB table 2 shall apply.

Table 2: Risk Weights for Multilateral Development Banks

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

Article 5
Exposures to Banks

1. A bank exposure is defined as a claim (including loans and senior debt instruments, unless considered as subordinated debt) on any financial institution that is licensed to take deposits from the public and is subject to appropriate prudential standards and level of supervision.
2. Banks will assign to their rated bank exposures the corresponding risk weights determined by the external ratings according to table 3.

Table 3: Risk Weights for Banks

Credit rating	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to B-	Below B-	Unrated
Risk weight	20%	30%	50%	100%	150%	50%
Risk weight for short-term exposures	20%	20%	20%	50%	150%	20%

3. Exposures to banks with an original maturity of three months or less, as well as exposures to banks that arise from the movement of goods across national borders with an original maturity of six months or less can be assigned a risk weight that correspond to the risk weights for short term exposures.
4. A risk-weight floor based on the risk weight applicable to exposures to the sovereign debt of the country where the bank counterparty is incorporated will be applied to the risk weight assigned to bank exposures, except for short-term (i.e., with a maturity below one year) self-liquidating, and trade-related contingent items that arise from the movement of goods. The sovereign floor applies when the exposure is not in the local currency of the jurisdiction of incorporation of the debtor bank.
5. Exposures to securities firms and other financial institutions will be treated as exposures to banks provided that these firms are subject to prudential standards and a level of supervision equivalent to those applied to banks. Exposures to all other securities firms and financial institutions will be treated as exposures to corporates.

Article 6 Exposures to Corporates

1. Exposures to corporates include exposures (loans, bonds, receivables, etc) to incorporated entities, associations, partnerships, proprietorships, trusts, funds and other entities with similar characteristics, except those which qualify for one of the other exposure classes.
2. The corporate exposure class includes exposures to insurance companies and other financial corporates that do not meet the definitions of exposures to banks, or securities firms and other financial institutions, as determined in Article 5.
3. The corporate exposure class does not include exposures to individuals.
4. Banks will assign to all corporate claims a risk weight at 100%.
5. For unrated exposures to corporate Small and Medium Enterprises (SMEs), defined in the Decree-Law No. 23/2017, of 12 July, an 85% risk weight will be applied.
6. Exposures to SMEs that can be treated as regulatory retail exposures, as set in Article 7, will be risk weighted at 75%.

Article 7 Retail Exposures

1. Retail exposures are exposures to an individual person or persons, or to a micro or SME business, as defined on the previous Article.

2. Retail exposures secured by real estate will be treated according to the following Article 8. All other retail exposures will be treated as outlined below.
3. Retail exposures that meet all the criteria listed below will be classified as “regulatory retail” exposures and risk-weighted at 75%. Defaulted retail exposures are to be excluded from the overall regulatory retail portfolio when assessing the granularity criterion.
 - a) Product criterion. The exposure takes the form of any of the following: revolving credits and lines of credit (including credit cards, charge cards and overdrafts), personal term loans and leases (e.g., instalment loans, auto loans and leases, student and educational loans, personal finance) and small business facilities and commitments. Mortgage loans, derivatives and other securities (such as bonds and equities), whether listed or not, are specifically excluded from this category.
 - b) Low value of individual exposures: the maximum aggregated exposure to one counterparty cannot exceed an absolute threshold of US\$ 50,000.00.
 - c) Granularity criterion: no aggregated exposure to one counterparty can exceed 0.3% of the overall regulatory retail portfolio.
4. “Regulatory retail” exposures which meet the criteria in paragraph 3 that arise from obligors who qualify as transactors will be risk-weighted at 50%. Transactors are obligors in relation to facilities such as credit cards and charge cards where the balance has been repaid in full at each scheduled repayment date for the previous 12 months. Obligor in relation to overdraft facilities would also be considered as transactors if there have been no drawdowns over the previous 12 months.
5. “Other retail”: exposures to an individual person or persons that do not meet all the criteria in paragraph 2 will be risk-weighted at 100%.
6. Exposures to SMEs that do not meet all the criteria in paragraph 3 will be treated as corporate SMEs exposures under Article 6, unless secured by real estate.

Article 8

Exposures Secured by Mortgages on Residential Properties

1. Exposures secured by mortgages on residential property in Timor-Leste, except past due exposures, shall be risk-weighted at 50% subject to the under-listed conditions:
 - a) The loan to value ratio (LTV) is less than or equal to 80%;
 - b) lending must be fully secured by first legal mortgages on residential property;
 - c) the residential property must be occupied or intended to be occupied by the borrower or rented/to be rented by the borrower to a third party;
 - d) the residential property must be valued according to prudent valuation and that review is carried out by a valuer who possesses the necessary qualifications, ability and experience to execute a valuation and who is independent from the credit decision process;
 - e) the bank must be satisfied that the risk of the borrower is not dependent solely on the performance of the underlying property serving as collateral but rather on the capacity of the borrower to repay the debt from other sources;

- f) the value of the property must be monitored on a frequent basis and at a minimum once every three years and more frequently where there are indications that there are significant changes in market conditions; and
 - g) the property must be adequately insured.
2. Where all the conditions above are not satisfied, the exposure shall attract a risk weight of 100%.
 3. LTV ratio shall be computed as a percentage of the total outstanding in the account (without any netting) as the numerator and the realizable value of the residential property mortgaged to the bank as the denominator.
 4. Bank's exposure to one counterparty up to two properties will be categorized under "exposures secured by mortgage on residential property" whereas exposure for the third property and above will be treated as commercial real estate.

Article 9

Exposures Secured by Mortgages on Commercial Real Estates

Exposures secured by mortgages on commercial real estate located in Timor-Leste will be risk weighted at 100%.

Article 10

Exposures in Default

1. The unsecured portion of exposures in default, as defined in paragraphs 6 and 7 of this Article, other than a qualifying residential mortgage loan as defined on the paragraph 1 of Article 8 of this Annex, net of specific provisions (including partial write-offs), will be risk-weighted as follows:
 - a) 150% weight when specific provisions are less than 20% of the outstanding amount;
 - b) 100% weight when specific provisions are at least 20% of the outstanding amount.
2. Qualifying residential mortgage loan, as defined on the paragraph 1 of Article 8 of this Annex, that are in default, will be risk-weighted net of specific provisions (including partial write-offs), as follows:
 - a) 100% risk weight when specific provisions are less than 20% of the outstanding amount;
 - b) 50% risk weight when specific provisions are at least 20% of the outstanding amount.
3. For the purpose of computing the level of specific provisions for exposures in default for deciding the risk-weighting, all exposures in default of a single counterparty (without netting the value of the eligible collateral) should be considered in the denominator.
4. Defaulted exposures shall include exposures classified as loss or substandard loans, and restructured exposures, as defined by Instruction n. 17/2021 on Credit Classification, Provisions and Reserves.
5. Specifically, a default is considered to have occurred with regard to a particular obligor when either or both of the two following events have taken place:
 - a) The bank considers that the obligor is unlikely to pay its credit obligations to the bank in full, without recourse by the bank to actions such as realizing security (if held);

- b) The obligor is past due more than 90 days on any credit obligation to the bank. Overdrafts will be considered as being past due once the customer has breached an advised limit or been advised of a limit smaller than current outstanding.
- 6. For the purpose of point (a) of paragraph 5, elements to be taken as indications of unlikeliness to pay shall include the following: (a) the bank puts the credit obligation on non-accrued status; (b) the bank recognises a specific credit adjustment resulting from a significant perceived decline in credit quality subsequent to the bank taking on the exposure; (c) the bank sells the credit obligation at a material credit-related economic loss; (d) the bank consents to a distressed restructuring of the credit obligation where this is likely to result in a diminished financial obligation caused by the material forgiveness, or postponement, of principal, interest or, where relevant fees; (e) the bank has filed for the obligor's bankruptcy or a similar order in respect of an obligor's credit obligation to the bank, the parent undertaking or any of its subsidiaries; (f) the obligor has sought or has been placed in bankruptcy or similar protection where this would avoid or delay repayment of a credit obligation to the bank, the parent undertaking or any of its subsidiaries.
- 7. For the purpose of defining the secured portion of the past due exposures, eligible collateral will be the same as recognized for credit risk mitigation purposes.

Article 11 High Risk Exposures

- 1. The following exposures are regarded as high-risk exposures and are assigned specific risk weights as follows:
 - a) Claims on sovereign debt, PSEs, banks and securities firms rated below B- will be risk weighted 150%;
 - b) Claims on corporates rated below BB- will be risk weighted 150%;
 - c) Investments in significant minority - or majority-owned and - controlled commercial entities, below 15% of the bank's capital for individual investments or 60% of the bank's capital for the aggregate of such investments, must be risk-weighted at 100%. Investments in excess of these thresholds must be risk-weighted at 1250%.
- 2. Investments in equity or regulatory capital instruments issued by banks or securities firms will be risk weighted at 100%, unless deducted from the capital base according to Article 9 of this Instruction.

Article 12 Unsettled and Failed Transactions

- 1. A bank shall comply with the requirements, described below, to calculate the credit-risk weighted exposure amount for any unsettled transaction on debt instruments, equities, foreign currencies and commodities excluding repurchase transactions and securities or commodities lending and securities or commodities borrowing are unsettled after their due delivery dates.
- 2. For those transactions, a bank shall calculate the price difference to which it is exposed.
- 3. The price difference is calculated as the difference between the agreed settlement price for the debt instrument, equity, foreign currency or commodity in

question and its current market value, where the difference could involve a loss for the bank.

4. The bank shall multiply that price difference by the appropriate factor in the right column of the following Table 4 in order to calculate the institution's own funds requirement for settlement risk
5. Delivery vs. Payment (DVP) transactions are those that payment occurs before or at the moment of the delivery. A bank shall apply a risk weight to any exposure arising from receivables that remains unpaid or undelivered in respect of an unsettled DVP transaction in accordance with Table 4 below.

Table 4: Risk weight to exposure on failed transactions

Number of business days after the agreed settlement date	Risk Weight
From 0 to 4	0%
From 5 to 15	100%
From 16 to 30	625%
From 31 to 45	937%
46 days or more	1250%

6. Non-DVP transactions are those that do not have a priority order for delivery or payment. A bank, which has fulfilled its obligations under the first contractual payment or delivery leg of a non-DVP transaction, shall regard as a loan exposure to its counterparty any outstanding receivables after the end of the first contractual payment or delivery date. If the receivables remain unpaid or undelivered after the second contractual payment or delivery date, the bank shall risk weight the exposure in the following manner:
 - a) according to the risk weight of the counterparty under the credit risk framework if the exposures remain unpaid or undelivered up to and including the fourth business day after the second contractual payment or delivery date;
 - b) 1250% risk weight to such receivables and replacement cost if the receivable remains unpaid or undelivered on or after the fifth business day after the second contractual payment or delivery date.

Article 13 Other Exposures

1. The following weights will be applied to exposures:
 - a) 0% risk weight: cash and gold bullion held in bank's own vault;
 - b) 20% risk weight: cheques and other items in transit.
2. The standard risk weight for all other assets will be 100%, including:
 - a) Investment in premises and equipment and other fixed assets;
 - b) Prepayments;
 - c) Any other assets not specified above.

ANNEX II: MEASUREMENT OF OFF-BALANCE SHEET EXPOSURES

Article 1

Off-balance Sheet Exposures other than OTC Derivative Transactions

1. The notional amount of an off-balance sheet instrument does not always reflect the amount of the credit risk exposure. The notional amount of the instrument must be multiplied by a credit conversion factor (CCF) to derive a credit exposure equivalent.
2. The resulting credit equivalent amount is then treated as an on-balance sheet instrument and is assigned the weight appropriate to the counterparty or, if relevant, the weight assigned to the guarantor or the collateral security.
3. The categories of credit conversion factors are outlined below.
 - a) **High risk: CCF – 100%**
 - i. Guarantees having the character of credit substitutes;
 - ii. Acceptances;
 - iii. Endorsements on bills not bearing the name of another bank;
 - iv. Irrevocable standby letters of credit having the character of credit substitutes;
 - v. Spot and forward purchase commitments for securities and other financial instruments other than foreign exchange;
 - vi. Forward deposits and loans to be made;
 - vii. The unpaid portion of partly paid-up shares and securities,
 - viii. Sale and repurchase agreements where the credit risk remains with the bank;
 - ix. Assets transferred with option for repurchase upon demand by transferee;
 - x. Lending of bank's securities or the posting of securities as collateral;
 - xi. Other lending commitments of certain utilization.
 - b) **Above average risk: CCF- 50%**
 - i. Transaction-related contingencies (for example, bid bonds, performance bonds, warranties, and standby letters of credit related to a particular transaction);
 - ii. Commitments with an original maturity exceeding one year, including underwriting commitments and commercial credit lines not having the character of credit substitutes;
 - iii. Revolving underwriting facilities (RUFs), note issuance facilities (NIFs) and other similar arrangements;
 - iv. Undrawn credit facilities (lending commitments, commitments to provide guarantees or acceptance facilities) with an original maturity of more than one year.

c) Moderate risk: CCF- 20%

- i. Short-term, self-liquidating trade-related contingencies, including commercial/ documentary letters of credit, not having the character of credit substitutes;
- ii. Undrawn credit facilities with original maturity up to one year which may not be cancelled unconditionally at any time without notice or that do not effectively provide for automatic cancellation due to deterioration in a borrower's creditworthiness;.

d) Low risk: CCF- 0%

- i. Undrawn credit facilities that provide for automatic cancellation due to deterioration in a borrower's creditworthiness;
- ii. Commitments that are unconditionally cancellable at any time without prior notice.

Article 2

Over-the-counter (OTC) Derivative Transactions

1. For exposures that give rise to counterparty credit risk (i.e., OTC derivatives, exchange-traded derivatives, long settlement transactions and securities financing transactions), the exposure amount to be used in the determination of RWA is to be calculated under the rules set out in Annex V – Counterparty credit risk..
2. A bank is not exposed to credit risk for the full notional amount of their contracts (notional principal amount), but only to the potential cost of replacing the cash flow (on contracts showing a positive value) if the counterparty defaults.
3. In calculating a bank's counterparty credit risk exposures arising from interest rate and foreign exchange rate OTC derivatives, the bank shall include all its OTC derivative transactions held in the banking and trading books which give rise to counterparty credit risk.

ANNEX III: CREDIT RISK MITIGATION

Article 1 Introduction

1. This Annex sets out the principles for the recognition of Credit Risk Mitigation (CRM) techniques that a bank may use under the Standardized Approach to Credit Risk for the purpose of calculating its capital requirements.
2. Banks may use a few techniques to mitigate the credit risks to which they are exposed. The framework set out in this Annex is applicable to the banking book exposures in the standardized approach.
3. No transaction in which CRM techniques are used shall receive a higher capital requirement than an otherwise identical transaction where such techniques are not used.
4. The effects of CRM will not be double counted. Therefore, no recognition of CRM for regulatory capital purposes will be granted on claims for which an issue-specific rating is used that already reflects that CRM.
5. For a bank to obtain capital relief for any use of CRM techniques, all documentation used in collateralized transactions and for documenting on balance sheet netting, guarantees and credit derivatives must be binding on all parties and legally enforceable in all relevant jurisdictions.
6. Where the residual maturity of the CRM is less than that of the underlying credit exposure a maturity mismatch occurs. Where there is a maturity mismatch and the CRM has an original maturity of less than one year, the CRM is not recognized for capital purposes. In other cases where there is a maturity mismatch, partial recognition is given to the CRM for regulatory capital purposes as detailed below.

Article 2 CRM Approaches

1. The types of CRM techniques described that can be used are:
 - a) financial collaterals;
 - b) netting;
 - c) guarantees and credit derivatives.
2. In the case where a bank has multiple CRM techniques covering a single exposure (e.g., a bank has both collateral and guarantee partially covering an exposure), the bank will be required to subdivide the exposure into portions covered by each type of CRM technique (e.g., portion covered by collateral, portion covered by guarantee), and the risk-weighted assets of each portion must be calculated separately. When credit protection provided by a single protection provider has differing maturities, they must be subdivided into separate protection as well.

Article 3 Financial Collaterals

1. A collateralized transaction is one in which a bank has a credit exposure or potential credit exposure, and that credit exposure or potential credit exposure is hedged in whole or in part by collateral posted by a counterparty or by a third party on behalf of the counterparty.

2. Where a bank takes eligible financial collateral, as cash or securities, it is allowed to reduce its credit exposure to a counterparty when calculating the capital requirements to take account of the risk mitigating effect of the collateral.
3. A bank can offset the collateral against exposures, using the comprehensive approach, by effectively reducing the exposure amount by the value ascribed to the collateral.

Article 4
Eligible Collateral Instruments

1. There must be a formal written contractual agreement between the lender and the party lodging the collateral which establishes the lender’s direct, explicit, irrevocable, and unconditional recourse to the collateral.
2. The legal mechanism by which collateral is pledged or transferred must ensure that the bank has the right to liquidate or take legal possession of it, in a timely manner, in the event of the default, insolvency or bankruptcy of the counterparty. Furthermore, a bank must take all steps necessary to fulfil those requirements under the law applicable to the bank’s interest in the collateral for obtaining and maintaining an enforceable security interest, e.g., by registering it with a registrar, or for exercising a right to net or set off in relation to title transfer collateral.
3. A bank must have clear and robust procedures for the timely liquidation of collateral to ensure that any legal conditions required for declaring the default of the counterparty and liquidating the collateral are observed, and that collateral can be liquidated promptly.
4. In the event of default, any requirement on the lender to serve notice on the party lodging the collateral must not unnecessarily impede the lender’s recourse to the collateral.
5. Where the collateral is held by a custodian, a bank must take reasonable steps to ensure that the custodian segregates the collateral from its own assets.
6. The following collateral instruments, mentioned in Table 1 below, are eligible for recognition.

Table 1: Eligible collateral instruments

a)	Cash on deposit with the bank (as well as certificates of deposit or comparable instruments issued by the lending bank) which is incurring the counterparty exposure
b)	Gold
c)	Debt securities issued by the Government of Timor-Leste and the BCTL
d)	Debt securities rated by an ECAI at least BB- or at least A-3/P-3 for short-term debt instruments
e)	Equities (including convertible bonds) that are included in a main index. A bank must seek the approval of BCTL for using equity shares, as CRM, traded in exchanges in other countries or traded on a recognized exchange. In all other cases, a bank will seek the approval of BCTL before recognizing such instruments as eligible collateral

7. Re-securitizations (as defined in the securitization framework), irrespective of any credit ratings, are not eligible financial collateral.

Article 5
Calculation of Capital Requirement

1. For a collateralized transaction, the exposure amount after risk mitigation is calculated using the formula that follows:

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

where:

E^* = the exposure value after risk mitigation

E = current value of the exposure

H_e = haircut appropriate to the exposure

C = the current value of the collateral received

H_c = haircut appropriate to the collateral

2. The exposure amount after risk mitigation will be multiplied by the risk weight of the counterparty to obtain the risk-weighted asset amount for the collateralized transaction.
3. Using haircuts, a bank is required to adjust both the amount of the exposure to the counterparty and the value of any collateral received in support of that counterparty to take account of possible future fluctuations in the value of either, due to movement in risk factors in the market. This will produce volatility adjusted amounts for both exposure and collateral. Unless either side of the transaction is cash, the volatility adjusted amount for the exposure will be higher than the exposure and for the collateral it will be lower.
4. The standard supervisory haircuts are applied to the security (H_c) with reference to the rating of the issuer and to the exposure (H_e) with reference to the rating of the counterparty.
5. The standard supervisory haircuts (H_e and H_c) are expressed as percentages in the Table 2 below.

Table 2: Standard Supervisory Haircuts

Issue rating by ECAI for debt securities	Residual Maturity	Sovereigns (%)	Other issuers (%)
AAA to AA-/A-1 (long and short positions), TL Government bonds	≤ 1 year	0,50	1,00
	>1 year, < 5 years	2,00	4,00
	> 5 years	4,00	8,00
A+ to BBB-/ A-2/A-3/P-3 and unrated bank securities	≤ 1 year	1,00	2,00
	>1 year, < 5 years	3,00	6,00
	> 5 years	6,00	12,00
BB+ to BB-		15,00	NA
Main index equities (including convertible bonds) and gold		15	
Other equities (including convertible bonds) listed on a recognized exchange		25	
Cash in the same currency		0	

6. The standard supervisory haircut for currency risk where exposure and collateral are denominated in different currencies is 10%.
7. A bank shall calculate net credit exposure of off-balance sheet exposure using credit risk mitigation by applying the following formula:

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

where:

E^* = the net exposure value after risk mitigation

E = the current value of the exposure

H_e = haircut appropriate to the exposure

C = the current value of the collateral received

H_c = haircut appropriate to the collateral

CCF = CCF applicable to the off-balance sheet exposure

Article 6 Netting

1. Where a bank has legally enforceable netting arrangements for loans and deposits the bank may calculate capital requirements based on net credit exposures subject to the following conditions.
2. For capital adequacy purpose, a bank may compute net exposure of loans and deposit of a specific obligor for on-balance sheet exposure. Assets (loans) are treated as exposure and liabilities (deposits) as collateral. The haircuts will be zero and no currency mismatch admitted.
3. A bank shall ensure that the following conditions are met for eligibility for using on-balance sheet netting as a CRM metric:
 - a) The bank has a well-founded legal basis for concluding that the netting or offsetting agreement is enforceable in Timor-Leste and in each relevant jurisdiction upon the occurrence of a default and regardless of whether the counterparty is insolvent or bankrupt;
 - b) The bank is able at any time to determine those assets and liabilities with the same counterparty that are subject to the netting agreement;
 - c) The bank monitors and controls its roll-off risks; and
 - d) The bank monitors and controls the relevant exposures on a net basis.
4. In addition, netting agreements must:
 - a) provide the non-defaulting party the right to terminate and close-out in a timely manner all transactions under the agreement upon an event of default, including in the event of insolvency or bankruptcy of the counterparty;
 - b) provide for the netting of gains and losses on transactions (including the value of any collateral) terminated and closed out under it so that a single net amount is owed by one party to the other;
 - c) allow for the prompt liquidation or set-off of collateral upon the event of default.

5. The master netting agreement, for OTC derivatives and repo-style transactions, is an agreement, in writing, between two parties, that sets out standard terms that apply to all the transactions entered between those parties. Each time that a transaction is entered into, the terms of the master agreement do not need to be re-negotiated and apply automatically. Under the master netting arrangement, a bank can net its positive and negative exposures with the counterparty to a single netted exposure for capital adequacy purpose.
6. For a bank using the standard supervisory haircuts, the framework below shall apply to take into account the impact of master netting agreements:

$$E^* = \max \{0, [(\Sigma (E) - \Sigma(C)) + \Sigma (Es \times Hs) + \Sigma (Efx \times Hfx)]\}$$

where:

E^* = the exposure value after risk mitigation

E = current value of the exposure

C = the value of the collateral received

Es = absolute value of the net position in each security

Hs = haircut appropriate to Es

Efx = absolute value of the net position in a currency different from the settlement currency

Hfx = haircut appropriate for currency mismatch

7. For OTC derivative transactions, a bank shall calculate the credit equivalent amount of its net credit exposure to counterparty by adding together the net current exposure and the net potential exposure as described under comprehensive approach for treatment of financial collaterals.

Article 7
Guarantee and Credit Derivative Contracts

1. A guarantee (counter-guarantee) or credit derivative must represent a direct claim on the protection provider and must be explicitly referenced to specific exposures or a pool of exposures, so that the extent of the cover is clearly defined and incontrovertible.
2. The guarantee must be irrevocable, i.e., there must be no clause in the contract that would allow the protection provider unilaterally to cancel the credit cover. It must also be unconditional; there should be no clause in the protection contract outside the direct control of the bank that could prevent the protection provider from being obliged to pay out in a timely manner if the original counterparty fails to make the payment(s) due. Besides, it could not have any clause that would increase the effective cost of protection as a result of a deterioration in the credit quality of the protected exposure or could allow the maturity of the credit protection to be reduced by the protection provider.
3. Where guarantees or credit derivatives have the legal certainty requirements established on the above paragraph, a bank is allowed to take account of such credit protection in calculating capital requirements, if the following conditions are also satisfied:

- a) On the qualifying default/non-payment of the counterparty, the bank may in a timely manner pursue the guarantor for any monies outstanding under the documentation governing the transaction. The guarantor may make one lump sum payment of all monies under such documentation to the bank, or the guarantor may assume the future payment obligations of the counterparty covered by the guarantee. The bank must have the right to receive any such payments from the guarantor without first having to take legal actions to pursue the counterparty for payment.
 - b) The guarantee is an explicitly documented obligation assumed by the guarantor.
 - c) The guarantee covers all types of payments the underlying obligor is expected to make under the documentation governing the transaction and any uncovered payments shall be treated as an unsecured amount.
4. Additionally, for a credit derivative contract to be recognized, the following conditions must be satisfied:
- a) The credit events specified by the contracting parties must at a minimum cover:
 - i. failure to pay the amounts due under terms of the underlying obligation that are in effect at the time of such failure (with a grace period that is closely in line with the grace period in the underlying obligation);
 - ii. bankruptcy, insolvency, or inability of the obligor to pay its debts, or its failure or admission in writing of its general inability to pay its debts as they become due, and analogous events; and
 - iii. restructuring of the underlying obligation involving forgiveness or postponement of principal, interest or fees that results in a credit loss event (i.e., charge-off, specific provision or other similar debit to the profit and loss account).
 - b) The credit derivative cannot cover obligations that do not include the underlying obligation.
 - c) The credit derivative shall not terminate prior to expiration of any grace period required for a default on the underlying obligation to occur because of a failure to pay.
 - d) Credit derivatives allowing for cash settlement are recognized for capital purposes insofar as a robust valuation process is in place to estimate loss reliably. There must be a clearly specified period for obtaining post credit-event valuations of the underlying obligation.
 - e) If the protection purchaser's right/ability to transfer the underlying obligation to the protection provider is required for settlement, the terms of the underlying obligation must provide that any required consent to such transfer may not be unreasonably withheld.
 - f) The identity of the parties responsible for determining whether a credit event has occurred must be clearly defined. This determination must not be the sole responsibility of the protection provider. The protection buyer must have the right/ability to inform the protection provider of the occurrence of a credit event.

5. Only credit default swaps and total return swaps that provide credit protection equivalent to guarantees will be eligible for recognition. Other types of credit derivatives will not be eligible for recognition.
6. Where an institution buys credit protection through a total return swap and records the net payments received on the swap as net income, but does not record the offsetting deterioration in the value of the asset that is protected either through reductions in fair value or by an addition to reserves, that credit protection does not qualify as eligible credit protection.
7. The general risk-weight treatment for transactions in which eligible credit protection is provided is as follows:
 - a) The protected portion is assigned the risk weight of the protection provider. The uncovered portion of the exposure is assigned the risk weight of the underlying counterparty.
 - b) Materiality thresholds on payments below which no payment is made in the event of loss are equivalent to retained first loss positions and must be deducted in full from the capital of the bank purchasing the credit protection.
8. Where the amount guaranteed, or against which credit protection is held, is less than the amount of the exposure, and the secured and unsecured portions are of equal seniority, i.e., the bank and the guarantor share losses on a pro-rata basis, capital relief will be afforded on a proportional basis. That is, the protected portion of the exposure will receive the treatment applicable to eligible guarantees/credit derivatives, with the remainder treated as unsecured.
9. A substitution approach shall be applied and only guarantees issued by or protection provided by entities with a lower risk weight than the counterparty will lead to reduced capital charges, since the protected portion of the counterparty exposure is assigned the risk weight of the guarantor or protection provider, whereas the uncovered portion retains the risk weight of the underlying counterparty.
10. Guarantee and credit protection provided by sovereign entities, central banks and banks will be recognized for treatment of CRM. For determining the risk weight of banks incorporated outside Timor-Leste, the rating of the respective foreign sovereign will be taken, with one rating grade less favourable.
11. Where the credit protection is denominated in a currency different from that in which the exposure is denominated (i.e., there is a currency mismatch), the amount of the exposure deemed to be protected (GA) shall be reduced by the application of a haircut of 8% as follows:

$$GA = G \times 0,90, \text{ where } G = \text{nominal amount of the credit protection.}$$

Article 8
Maturity Mismatch

1. For the purposes of calculating risk-weighted assets, a maturity mismatch occurs when the residual maturity of a hedge is less than that of the underlying exposure.
2. The maturity of the underlying exposure and the maturity of the hedge shall both be defined conservatively. The effective maturity of the underlying shall be gauged as the longest possible remaining time before the counterparty is scheduled to fulfil its obligation, considering any applicable grace period.

3. Where a call is at the discretion of the protection provider, the maturity will always be at the first call date. If the call is at the discretion of the protection buying bank but the terms of the arrangement at origination of the hedge contain a positive incentive for the bank to call the transaction before contractual maturity, the remaining time to the first call date will be deemed to be the effective maturity.
4. Hedges with maturity mismatches are only recognized when their original maturities are greater than or equal to one year. As a result, the maturity of hedges for exposures with original maturities of less than one year must be matched to be recognized. In all cases, hedges with maturity mismatches shall not be recognized when they have a residual maturity of three months or less.
5. When there is a maturity mismatch with recognized credit risk mitigants (collateral, on-balance sheet netting, guarantees and credit derivatives) the following adjustment applies, where:

$$Pa = P * \frac{t - 0,25}{T - 0,25}$$

Pa = value of the credit protection adjusted for maturity mismatch

P = credit protection (e.g., collateral amount, guarantee amount) adjusted for any haircuts

t = min (T, residual maturity of the credit protection arrangement) expressed in years

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

ANNEX IV: SECURITIZATION FRAMEWORK

Article 1 Scope and Definitions

1. A bank must apply the securitization framework for determining regulatory capital requirements on exposures arising from traditional and synthetic securitizations or similar structures that contain features common to both.
2. Since securitizations may be structured in different ways, the capital treatment of a securitization exposure must be determined on the basis of its economic substance rather than its legal form. The BCTL will look to the economic substance of a transaction to determine whether it should be subject to the securitization framework for purposes of determining regulatory capital.
3. A traditional securitization is a structure where the cash flow from an underlying pool of exposures is used to service at least two different stratified risk positions or tranches reflecting different degrees of credit risk. Payments to the investors depend upon the performance of the specified underlying exposures, as opposed to being derived from an obligation of the entity originating those exposures. This shall be accomplished by the transfer of ownership of the securitized exposures from the originator institution to a Special Purpose Entity. The securities issued do not represent payment obligations of the originator institution.
4. A synthetic securitization means a securitization where the transfer of risk is achieved using credit derivatives or guarantees, and the exposures being securitized remain exposures of the originator institution. It is a structure with at least two different stratified risk positions or tranches that reflect different degrees of credit risk where credit risk of an underlying pool of exposures is transferred, in whole or in part, through the use of funded (e.g., credit-linked notes) or unfunded (e.g., credit default swaps) credit derivatives or guarantees that serve to hedge the credit risk of the portfolio. Accordingly, the investors' potential risk is dependent upon the performance of the underlying pool.
5. A bank's exposures to a securitization are hereafter referred to as "securitization exposures". Securitization exposures can include but are not restricted to the following: asset-backed securities, mortgage-backed securities, credit enhancements, liquidity facilities, interest rate or currency swaps and credit derivatives. Reserve accounts, such as cash collateral accounts, recorded as an asset by the originating bank must also be treated as securitization exposures.
6. Underlying instruments in the pool being securitized may include but are not restricted to the following: loans, commitments, asset-backed and mortgage-backed securities, corporate bonds, equity securities, and private equity investments. The underlying pool may include one or more exposures.
7. For risk-based capital purposes, a bank is an originator regarding a certain securitization if it meets either of the following conditions:
 - a) the bank originates, directly or indirectly, underlying exposures included in the securitization; or
 - b) the bank serves as a sponsor of an asset-backed commercial paper (ABCP) conduit or similar programme that acquires exposures from third-party entities. In the context of such programmes, a bank would generally be considered a sponsor and, in turn, an originator if it, in fact or in substance,

manages or advises the programme, places securities into the market, or provides liquidity and/or credit enhancements.

8. An Asset-Backed Commercial Paper program (ABCP programme) predominantly issues commercial paper to third-party investors with an original maturity of one year or less and is backed by assets or other exposures held in a bankruptcy-remote, special purpose entity.
9. A clean-up call is an option that permits the securitization exposures (e.g., asset-backed securities) to be called before all the underlying exposures or securitization exposures have been repaid. In the case of traditional securitizations, this is generally accomplished by repurchasing the remaining securitization exposures once the pool balance or outstanding securities have fallen below some specified level. In the case of a synthetic transaction, the clean-up call may take the form of a clause that extinguishes the credit protection.
10. A credit enhancement is a contractual arrangement in which the bank or other entity retains or assumes a securitization exposure and, in substance, provides some degree of added protection to other parties to the transaction.
11. An early amortization provision is a mechanism that, once triggered, allows investors to be paid out prior to the originally stated maturity of the securities issued.
12. A securitization of revolving credit facilities is a securitization in which one or more underlying exposures represent, directly or indirectly, current or future draws on a revolving credit facility. Examples of revolving credit facilities include but are not limited to credit card exposures, home equity lines of credit, commercial lines of credit, and other lines of credit.
13. A securitization exposure (tranche) is a senior exposure (tranche) if it is effectively backed or secured by a first claim on the entire amount of the assets in the underlying securitized pool.
14. A 'rated position' means a securitization position which has an eligible credit assessment by an ECAI as referred to in Article 15 of this Instruction while 'unrated position' means a securitization position which does not have such eligible credit assessment.
15. A 're-securitization' exposure is a securitization exposure in which the risk associated with an underlying pool of exposures is tranced and at least one of the underlying exposures is a securitization exposure. In addition, an exposure to one or more re-securitization exposures is a re-securitization exposure.

Article 2

Securitization Exposure

1. The exposure value of an on-balance sheet securitization position shall be its accounting value and the exposure value of an off-balance sheet securitization position shall be its nominal value. For off-balance sheet items a credit conversion factor (CCF) shall be applied to determine the exposure and the conversion factor shall be 100 % unless otherwise specified.
2. A bank may recognize a credit protection obtained in respect of a securitization position in accordance with annex III.

Article 3
Risk Weights of Securitization Exposure

1. Unless a securitization position is deducted from Common Equity Tier 1, the risk-weighted exposure amount shall be included in the bank's total of risk-weighted exposure amounts for the purposes of credit risk weighted assets and regulatory capital. The methodology here adopted is called Securitization External Ratings Based Approach (SEC-ERBA), based on external ratings.
2. The risk- weighted exposure amount of a rated securitization or re-securitization position is computed by multiplying the amount of the position, calculated as set out in Article 2, by the appropriate risk weight determined in accordance with the following tables.
3. For off-balance sheet exposures, banks must apply a CCF and then risk weight the resultant credit equivalent amount. If such an exposure is unrated, a CCF of 100% must be applied.
4. Risk weights for long-term and short-term securitization exposures are set out in the tables 1 and 2 below.

Table 1: Risk weights – long-term securitization exposure

External Credit Assessment	AAA to AA-	A+ to A-	BBB+ to BBB-	BB+ to BB-	B+ and below or unrated
Securitization Exposures	20%	50%	100%	350%	1250%
Re-Securitization Exposures	40%	100%	225%	650%	1250%

Table 2: Risk Weights - Short-term securitization exposure

External Credit Assessment	A-1/P-1	A-2/P-2	A-3/P-3	All other ratings or unrated
Securitization Exposures	20%	50%	100%	1250%
Re-securitization Exposures	40%	100%	225%	1250%

5. When a bank is an originator institution of a traditional securitization, it may exclude securitized exposures from the calculation of risk-weighted exposure amounts and expected loss amounts if either of the following conditions is fulfilled:
 - a) significant credit risk associated with the securitized exposures is considered to have been transferred to third parties;
 - b) the originator institution applies a 1 250 % risk weight to all securitization positions it holds in this securitization or deducts these securitization positions from Common Equity Tier 1.
6. In the case of being originator of a synthetic securitization, a bank shall calculate risk- weighted exposure amounts, and, as relevant, expected loss amounts, in respect of the securitized exposures in accordance with the Annex I if either the conditions mentioned in paragraph 5 is fulfilled.
7. A bank meeting these conditions must still hold regulatory capital against any securitization exposures the bank retains, and it shall calculate the risk-weighted exposure amounts prescribed in this Article for the positions that it may hold in the securitization.

8. Where the originator institution has not transferred significant credit risk or has decided not to apply paragraph 5, it need not calculate risk-weighted exposure amounts for any positions it may have in the securitization in question but shall continue including the securitized exposures in its calculation of risk-weighted exposure amounts as if they had not been securitized.
9. For an originator institution or sponsor institution, the risk-weighted exposure amounts calculated in respect of its securitization positions in any one securitization may be limited to the risk-weighted exposure amounts which would currently be calculated for the securitized exposures had they not been securitized subject to the presumed application of a 150 % risk weight to the following:
 - a) all items currently in default;
 - b) all items associated with particularly high-risk exposures in accordance with Annex I - Article 11 amongst the securitized exposures, unless a higher risk weight be applied.

Article 4

Credit Conversion Factors for Off-balance Sheet Exposures

1. A bank must determine whether, according to the criteria outlined below, an off-balance sheet securitization exposure qualifies as an 'eligible liquidity facility'. All other off-balance sheet securitization exposures will receive a 100% CCF.
2. A liquidity facility, provided by a bank as part of a securitization transaction, is an eligible liquidity facility where:
 - a) Facility documentation clearly identifies and limits the circumstance under which the facility may be drawn;
 - b) Drawings under the facility are limited to the amount which is likely to be paid from the liquidation of the underlying exposures of the securitization transaction and any credit enhancement provided by the originating bank. 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 indicated by regular or continuous draws);
 - c) The facility is subject to an asset quality test which precludes it from being drawn to cover credit risk exposures that are already in default. In addition, if the exposures that a liquidity facility is required to fund are externally rated securities, the facility can only be used to fund securities that are externally rated investment grade at the time of funding;
 - d) The facility cannot be drawn after all applicable (e.g., transaction-specific and programme-wide) credit enhancements from which the liquidity would benefit have been exhausted;
 - e) The facility is not capable of being drawn after all credit enhancements of the securitization exposure, have been exhausted; and
 - f) Repayment of drawing on the facility is not subordinated to the claims of investors in the securitization issues.
3. Where these conditions are met, a bank shall apply:
 - a) a 20% CCF to the undrawn portion of the eligible liquidity facility if the facility has original maturity of one year or less; and

- b) a 50% CCF to undrawn portion of the eligible liquidity facility if the facility has original maturity of more than one year.
- 4. A bank shall deduct the undrawn portion of a liquidity facility, which is not an eligible liquidity facility and is unrated, from its capital.
- 5. To determine the exposure value of cash advance facilities, a conversion factor of 0% may be applied to the nominal amount of a liquidity facility that is unconditionally cancellable provided that the conditions set out in paragraph 2 are satisfied and that repayment of draws on the facility are senior to any other claims on the cash flows arising from the securitized exposures.

Article 5
Operational Requirements for Recognition of Risk Transfer

- 1. An originating bank may exclude securitized exposures from the calculation of risk-weighted assets only if all the following conditions have been met:
 - a) Significant credit risk associated with the securitized exposures has been transferred to third parties;
 - 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 bankruptcy or receivership. These conditions must be supported by an opinion provided by a qualified legal counsel. The transferor is deemed to have maintained effective control over the transferred credit risk exposures if it:
 - i. can repurchase from the transferee the previously transferred exposures in order to realize their benefits; or
 - ii. is obligated to retain the risk of the transferred exposures. The transferor's retention of servicing rights to the exposures will not necessarily constitute indirect control of the exposures.
 - c) The securities issued are not obligations of the transferor. Thus, investors who purchase the securities only have claim to the underlying pool of exposures.
 - d) The transferee is a Special Purpose Entity (SPE) and the holders of the beneficial interests in that entity have the right to pledge or exchange them without restriction.
 - e) The securitization does not contain clauses that:
 - i. require the originating bank 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;
 - ii. allow for increases in a retained first loss position or credit enhancement provided by the originating bank after the transaction's inception; or
 - iii. increase the yield payable to parties other than the originating bank, such as investors and third-party providers of credit enhancements, in response to a deterioration in the credit quality of the underlying pool.

2. For synthetic securitizations, the use of credit risk mitigation (CRM) techniques (i.e., collateral, guarantees and credit derivatives) for hedging the underlying exposure may be recognized for risk-based capital purposes only if the conditions outlined below are satisfied:
 - a) Credit risk mitigants must comply with the requirements set out in Annex III.
 - b) Eligible collateral is limited to that specified in Annex III.
 - c) Eligible guarantors in the securitization framework are those admitted in Annex III and banks may not recognize Special Purpose Entity (SPE) as guarantors.
 - d) Banks 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
 - f) A bank should obtain legal opinion that confirms the enforceability of the contract.
3. A bank shall deduct from its capital (Tier 1) any gain-on-sale in a securitization transaction where the bank is an originating bank. Any rated securitization exposure of the bank with long term credit quality grade of 4 or 5 (BB+ and below) where the bank is the originator or long-term credit quality grade of 5 (B+ and below) where the bank is the investor can be deducted 50% from Tier 1 capital and 50% from Tier 2 capital.
4. Any of the above deductions shall be based on outstanding book value in case of an on-balance sheet securitization exposure and credit equivalent amount in case of an off-balance sheet exposure.

Article 6

Capital Requirement for Early Amortization Provisions

1. Early amortization provisions are mechanisms that, once triggered, allow investors to be paid out prior to the originally stated maturity of the securities issued. An originating bank is required to hold capital against all or a portion of the investor' interest (i.e., against both the drawn and undrawn balances related to the securitized exposures) when:
 - a) it sells exposures into a structure that contains an early amortization feature; and
 - b) the exposures sold are of a revolving nature. These involve exposures where the borrower is permitted to vary the drawn amount and repayments within an agreed limit under a line of credit (e.g., credit card receivables and corporate loan commitments).
2. For a bank subject to the early amortization treatment, the total capital charge for all its positions will be subject to a maximum capital requirement (i.e., a "cap") equal to the greater of:
 - i. that required for retained securitization exposures, or
 - ii. the capital requirement that would apply had the exposures not been securitized.

3. A bank is not required to calculate a capital requirement for early amortizations in the following situations:
 - a) Replenishment structures where the underlying exposures do not revolve, and the early amortization ends the ability of the bank to add new exposures;
 - b) Transactions of revolving assets containing early amortization features that mimic term structures (i.e., where the risk on the underlying facilities does not return to the originating bank);
 - c) Structures where a bank securitizes one or more credit line(s) and where investors remain fully exposed to future draws by borrowers even after an early amortization event has occurred;
 - d) The early amortization clause is solely triggered by events not related to the performance of the securitized assets or the selling bank, such as material changes in tax laws or regulations.
4. An early amortization provision shall be considered to be controlled where all of the following conditions are met:
 - a) the originator institution has an appropriate own funds/liquidity plan in place to ensure that it has sufficient own funds and liquidity available in the event of an early amortization;
 - b) throughout the duration of the transaction there is pro-rata sharing between the originator's interest and the investor's interest of payments of interest and principal, expenses, losses and recoveries based on the balance of receivables outstanding at one or more reference points during each month;
 - c) the amortization period is considered sufficient for 90 % of the total debt (originator's and investors' interest) outstanding at the beginning of the early amortization period to have been repaid or recognized as in default;
 - d) the speed of repayment is no more rapid than would be achieved by straight-line amortization over the period set out in point c).
5. Where there is a securitization of revolving exposures subject to an early amortization provision, the originator institution shall calculate an additional risk-weighted exposure amount in respect of the risk that the levels of credit risk to which it is exposed may increase following the operation of the early amortization provision.
6. The institution shall calculate a risk-weighted exposure amount in respect of the sum of the exposure values of the originator's interest and the investors' interest.
7. The exposure value of the originator interest shall be the sum of the following items:
 - a) the exposure value of that notional part of a pool of drawn amounts sold into a securitization, the proportion of which in relation to the amount of the total pool sold into the structure determines the proportion of the cash flows generated by principal and interest collections and other associated amounts which are not available to make payments to those having securitization positions in the securitization;
 - b) the exposure value of that part of the pool of undrawn amounts of the credit lines, the drawn amounts of which have been sold into the securitization, the proportion of which to the total amount of such undrawn amounts is the same as the proportion of the exposure value described in point a) to the exposure value of the pool of drawn amounts sold into the securitization.

8. The originator's interest shall not be subordinate to the investors' interest.
9. The exposure value of the Investors' interest shall be the exposure value of the notional part of the pool of drawn amounts not falling within point a) of paragraph 7 plus the exposure value of that part of the pool of undrawn amounts of credit lines, the drawn amounts of which have been sold into the securitization, not falling within point b) of the same paragraph.
10. The risk-weighted exposure amount in respect of the exposure value of the originator's interest in accordance with point a) of paragraph 7 shall be calculated as that for a pro-rata exposure to the securitized drawn amounts exposures as if they had not been securitized and a pro rata exposure to the undrawn amounts of the credit lines, the drawn amounts of which have been sold into the securitization.

ANNEX V: COUNTERPARTY CREDIT RISK

Article 1 Requirements

1. Banks are required to identify their transactions that expose them to counterparty credit risk and calculate the relevant capital charge.
2. Counterparty Credit Risk (CCR) is the risk that the counterparty to a transaction could default before the final settlement of the transaction's cash flows. An economic loss would occur if the transactions or portfolio of transactions with the counterparty has a positive economic value at the time of default.
3. Unlike a firm's exposure to credit risk through a loan, where the exposure to credit risk is unilateral and only the lending bank faces the risk of loss, CCR creates a bilateral risk of loss: the market value of the transaction can be positive or negative to either counterparty to the transaction. The market value is uncertain and can vary over time with the movement of underlying market factors.

Article 2 Definitions and Terminology

1. A Central Counterparty (CCP) is a clearing house that interposes itself between counterparties to contracts traded in one or more financial markets, becoming the buyer to every seller and the seller to every buyer and thereby ensuring the future performance of open contracts. For the purposes of the capital framework, a CCP is a financial institution.
2. A Qualifying Central Counterparty (QCCP) is an entity that is licensed to operate as a CCP by the BCTL.
3. A clearing member is a member of, or a direct participant in, a CCP that is entitled to enter a transaction with the CCP, regardless of whether it enters into trades with a CCP for its own hedging, investment or speculative purposes or whether it also enters into trades as a financial intermediary between the CCP and other market participants.
4. A client is a party to a transaction with a CCP through either a clearing member acting as a financial intermediary, or a clearing member guaranteeing the performance of the client to the CCP.
5. Initial margin means a clearing member's or client's funded collateral posted to the CCP to mitigate the Potential Future Exposure (PFE) of the CCP to the clearing member arising from the possible future change in the value of their transactions.
6. Variation margin means a clearing member's or client's funded collateral posted on a daily or intraday basis to a CCP based upon price movements of their transactions.
7. Trade exposures include the current and potential future exposure of a clearing member or a client to a CCP arising from over-the-counter derivatives, exchange traded derivatives transactions or securities financing transactions, as well as initial margin. For the purposes of this definition, the current exposure of a clearing member includes the variation margin due to the clearing member but not yet received.
8. Offsetting transaction means the transaction leg between the clearing member and the CCP when the clearing member acts on behalf of a client.

9. Default funds also known as clearing deposits or guaranty fund contributions (or any other names), are clearing members' funded or unfunded contributions towards, or underwriting of, a CCP's mutualized loss sharing arrangements.
10. Long settlement transactions are transactions where a counterparty undertakes to deliver a security, a commodity, or a foreign exchange amount against cash, other financial instruments, or commodities, or vice versa, at a settlement or delivery date that is contractually specified as more than the lower of the market standard for this particular instrument and five business days after the date on which the bank enters into the transaction.
11. Securities Financing Transactions (SFTs) are transactions such as repurchase agreements, reverse repurchase agreements, security lending and borrowing, and margin lending transactions, where the value of the transactions depends on market valuations and the transactions are often subject to margin agreements.
12. Margin lending transactions are transactions in which a bank extends credit in connection with the purchase, sale, carrying or trading of securities. Margin lending transactions do not include other loans that happen to be secured by securities collateral. Generally, in margin lending transactions, the loan amount is collateralized by securities whose value is greater than the amount of the loan.
13. Netting set is a group of transactions with a single counterparty that are subject to a legally enforceable bilateral netting arrangement and for which netting is recognized for regulatory capital purposes (Annex III) that are applicable to the group of transactions, as credit risk mitigation techniques. Each transaction that is not subject to a legally enforceable bilateral netting arrangement should be interpreted as its own netting set for the purpose of these rules.
14. Current exposure is the larger of zero, or the current market value of a transaction or portfolio of transactions within a netting set with a counterparty that would be lost upon the immediate default of the counterparty, assuming no recovery on the value of those transactions in bankruptcy. Current exposure is often also called Replacement Cost (RC).
15. General wrong-way risk arises when the probability of default of counterparties is positively correlated with general market risk factors.
16. Specific wrong-way risk arises when the exposure to a particular counterparty is positively correlated with the probability of default of the counterparty due to the nature of the transactions with the counterparty.
17. Hedging set is a set of transactions within a single netting set within which full or partial offsetting is recognized for the purpose of calculating the potential future exposure (PFE) for counterparty credit risk.
18. Margin agreement is a contractual agreement or provisions to an agreement under which one counterparty must supply variation margin to a second counterparty when an exposure of that second counterparty to the first counterparty exceeds a specified level.
19. Margin threshold is the largest amount of an exposure that remains outstanding until one party has the right to call for variation margin.
20. Margin period of risk is the time period from the last exchange of collateral covering a netting set of transactions with a defaulting counterparty until that counterparty is closed out and the resulting market risk is re-hedged.

Article 3
Scope of Counterparty Credit Risk Charge

1. Banks must calculate a counterparty credit risk charge for all exposures that give rise to counterparty credit risk. The categories of transaction that give rise to counterparty credit risk are:
 - a) Over-the-counter (OTC) derivatives.
 - b) Exchange-traded derivatives.
 - c) Long settlement transactions.
 - d) Securities financing transactions.
2. The transactions listed in paragraph 1 generally exhibit the following abstract characteristics:
 - a) The transactions generate a current exposure or market value.
 - b) The transactions have an associated random future market value based on market variables.
 - c) The transactions generate an exchange of payments or an exchange of a financial instrument (including commodities) against payment.
 - d) The transactions are undertaken with an identified counterparty against which a unique probability of default can be determined.
3. Other common characteristics of the transactions listed above include:
 - a) Collateral may be used to mitigate risk exposure and is inherent in some transactions.
 - b) Short-term financing may be a primary objective in that the transactions mostly consist of an exchange of one asset for another (cash or securities) for a relatively short period of time, usually for the business purpose of financing. The two sides of the transactions are not the result of separate decisions but form an indivisible whole to accomplish a defined objective.
 - c) Netting may be used to mitigate the risk.
 - d) Positions are frequently valued (most commonly on a daily basis), according to market variables.
 - e) Remargining may be employed.
4. Banks are not required to calculate a counterparty credit risk charge for the following types of transactions:
 - a) Credit derivative protection purchased by the bank against a banking book exposure, or against a counterparty credit risk exposure, when the bank will determine its capital requirement for the hedged exposure.
 - b) Sold credit default swaps in the banking book where they are treated as a guarantee provided by the bank and subject to a credit risk charge for the full notional amount.

Article 4
Determination of the Exposure Value

1. For the transaction types listed in Article 3 above, banks must calculate their counterparty credit risk exposure, or Exposure at Default (EAD), using the methods set out below, according to the type of the transaction and the counterparty to the transaction.
2. A bank may determine the exposure value of repurchase transactions, securities or commodities lending or borrowing transactions, long settlement transactions and margin lending transactions in accordance with this Annex instead of making use of Annex I.

Article 5
Methods to Calculate Counterparty Credit Risk Exposure

1. The counterparty credit risk exposure of over-the-counter (OTC) derivatives, exchange-traded derivatives and long settlement transactions shall be determined using the approach adopted by this Annex.
2. For Securities Financing Transactions (SFTs), a bank shall use the comprehensive approach to the recognition of financial collateral, which has been set out in the credit risk mitigation section of the standardized approach to credit risk (see Annex III).
3. For exposures that are cleared through a CCP, banks must apply a specific method that covers:
 - a) the exposures of a bank to a CCPs when the bank is a clearing member of the CCP;
 - b) the exposures of a bank to its clients, when the bank is a clearing member and act as an intermediary between the client and the CCP; and
 - c) the exposures of a bank to a clearing member of a CCP, when the bank is a client of the clearing member, and the clearing member is acting as an intermediary between the bank and the CCP.
4. Finally, exposures to CCPs arising from the settlement of cash transactions (equities, fixed income, spot foreign exchange and spot commodities), are excluded from the requirements of the CCP method. They are instead subject to the requirements of unsettled transactions and failed trades referred on the Annex I.

Article 6
The Approach for Counterparty Credit Risk

1. EAD (Exposure At Default) is to be calculated separately for each netting set (each transaction that is not subject to a legally enforceable bilateral netting arrangement should be interpreted as its own netting set). It is determined using the following formula, where:

$EAD = (RC + PFE)$
RC = the replacement cost
PFE = the amount for potential future exposure

2. RC (Replacement Cost) is defined as the greater of: (i) the current market value of the derivative contracts less net haircut collateral held by the bank (if any), and

(ii) zero. This is consistent with the use of replacement cost as the measure of current exposure, meaning that when the bank owes the counterparty money it has no exposure to the counterparty if it can instantly replace its trades and sell collateral at current market prices. The formula for RC is as follows, where:

$$RC = \max\{V-C; 0\}$$

V is the value of the derivative transactions in the netting set

C is the haircut value of net collateral held, calculated in accordance with the Annex III

3. To determine the PFE (Potential Future Exposure), banks shall multiply the notional amounts or underlying values, as applicable, by the percentages in Table 1 below and in accordance with the following principles:
- a) contracts which do not fall within one of the five categories indicated in Table 1 shall be treated as contracts concerning commodities other than precious metals.
 - b) for contracts with multiple exchanges of principal, the percentages shall be multiplied by the number of remaining payments still to be made in accordance with the contract.
 - c) for contracts that are structured to settle outstanding exposure following specified payment dates and where the terms are reset so that the market value of the contract is zero on those specified dates, the residual maturity shall be equal to the time until the next reset date. In the case of interest-rate contracts that meet those criteria and have a remaining maturity of over one year, the percentage shall be no lower than 0,5 %.

Table 1

Residual maturity	Interest-rate contracts	Contracts concerning foreign-exchange rates and gold	Contracts concerning equities	Contracts concerning precious metals except gold	Contracts concerning commodities other than precious metals
One year or less	0%	1%	6%	7%	10%
Over one year, not exceeding five years	0.5%	5%	8%	7%	12%
Over five years	1.5%	7.5%	10%	8%	15%

Article 7
Exposures to Central Counterparties

1. Regardless of whether a Central Counter Party (CCP) is classified as a qualifying CCP (QCCP), a bank retains the responsibility to ensure that it maintains adequate capital for its exposures arising from Over The Counter (OTC) derivatives, exchange-traded derivatives transactions, Securities Financing Transactions (SFTs) and long settlement transactions

2. Where a bank acts as a clearing member of a CCP for its own purposes, a risk weight of 2% must be applied to the bank's trade exposure to the CCP in respect of OTC derivatives, exchange-traded derivative transactions, SFTs and long settlement transactions.
3. Where the clearing member offers clearing services to clients, the 2% risk weight also applies to the clearing member's trade exposure to the CCP that arises when the clearing member is obligated to reimburse the client for any losses suffered due to changes in the value of its transactions if the CCP defaults. If the bank is not obligated to reimburse the client for any losses suffered due to changes in the value of that transaction in the event that the CCP defaults, the exposure value of the transaction with the CCP that corresponds to that CCP-related transaction is equal to zero
4. The treatment above also applies to a bank's exposure to a clearing member where the bank is a client of the clearing member, which is acting as a financial intermediary, or the clearing member guarantees the performance of the bank's exposure to the CCP if: : (a) the positions and assets of that institution related to those transactions are distinguished and segregated, at the level of both the clearing member and the CCP, from the positions and assets of both the clearing member and the other clients of that clearing member and as a result of that distinction and segregation those positions and assets are bankruptcy remote in the event of the default or insolvency of the clearing member or one or more of its other clients; (b) laws, regulations, rules and contractual arrangements applicable to or binding that institution or the CCP facilitate the transfer of the client's positions relating to those contracts and transactions and of the corresponding collateral to another clearing member within the applicable margin period of risk in the event of default or insolvency of the original clearing member. In such circumstance, the client's positions and the collateral shall be transferred at market value unless the client requests to close out the position at market value; (c) the institution has available an independent, written and reasoned legal opinion that concludes that, in the event of legal challenge, the relevant courts and administrative authorities would find that the client would bear no losses on account of the insolvency of its clearing member or of any of its clearing member's clients under the laws of the jurisdiction of the institution, its clearing member and the CCP, the law governing the transactions and contracts the institution clears through the CCP, the law governing the collateral, and the law governing any contract or agreement necessary to meet the condition in point (b); (d) the CCP is a QCCP.
5. If a clearing member collects collateral from a client for client cleared trades and this collateral is passed on to the CCP, the clearing member may recognize this collateral for both the CCP-clearing member leg and the clearing member-client leg of the client cleared trade. Therefore, initial margin posted by clients to their clearing member mitigates the exposure the clearing member has against these clients.
6. Where a client is not protected from losses in the case that the clearing member and another client of the clearing member jointly default or become jointly insolvent, but all other conditions in the preceding paragraph 4 are met, a risk weight of 4% will apply to the client's exposure to the clearing member, or to the higher-level client, respectively.

7. In all cases, any assets or collateral posted must, from the perspective of the bank posting such collateral, receive the risk weights that otherwise applies to such assets or collateral under the capital adequacy framework, although such assets have been posted as collateral. That is, collateral posted must receive the banking book or trading book treatment it would receive if it had not been posted to the CCP.
8. The posted assets or collateral are subject to the counterparty credit risk requirements, regardless of whether they are in the banking or trading book.
9. Where such collateral is included in the definition of trade exposures and the entity holding the collateral is the CCP, the following risk weights apply where the assets or collateral is not held on a bankruptcy-remote basis:
 - a) For banks that are clearing members a risk-weight of 2% applies.
 - b) For banks that are clients of clearing members:
 - i. a 2% risk-weight applies if the conditions established in paragraph 4 are met; or
 - ii. a 4% risk-weight applies if the conditions mentioned in paragraph 6 are met.
10. Where a default fund contributions from clearing members is established, all the default fund contributions will receive a risk weight of 20%.
11. Banks must apply the standardized approach for credit risk, according to the category of the counterparty, to their trade exposure to a non-qualifying CCP.
12. Banks must apply a risk weight of 1250% to their default fund contributions to a non-qualifying CCP.
13. Whenever a bank is required to capitalize for exposures arising from default fund contributions to a qualifying CCP, a risk weight of 20% shall be applied.
14. Where the sum of a bank's capital requirements for exposures to a QCCP due to its trade exposure and default fund contribution is higher than the total capital requirement that would be applied to those same exposures if the CCP were for a non-qualifying CCP, the latter total capital requirement shall be applied.

Article 8
Counterparty Credit Risk in the Trading Book

1. Banks must calculate the counterparty credit risk charge for Over-The-Counter (OTC) derivatives, repo-style and other transactions booked in the trading book, separate from the capital requirement for market risk. The risk weights to be used in this calculation must be consistent with those used for calculating the capital requirements in the banking book.
2. In the trading book, for repo-style transactions, all instruments, which are included in the trading book, may be used as eligible collateral.

ANNEX VI – METHODOLOGY FOR CALCULATION OF CAPITAL REQUIREMENTS FOR MARKET RISK

Section I Foreign Exchange Risk

Article 1 Measurement

1. A bank to determine the foreign exchange risk shall initially calculate its net open position in each currency by summing up:
 - a) the net spot positions (i.e. all asset items less all liability items, including accrued interest, denominated in the currency in question);
 - b) the net forward positions (i.e. all amounts to be received less all amounts to be paid under forward foreign exchange transactions, including currency futures and the principal on currency swaps, if not included in the spot position);
 - c) guarantees and other similar instruments denominated in foreign currency which are certain to be called and are likely to be irrecoverable;
 - d) net future incomes or expenses not yet accrued but already fully hedged, as may be determined by the bank; and
 - e) any other item representing a profit or loss in foreign currency.

2. Following, a bank shall calculate its net open position of the overall foreign currency assets and liability, using the called short-hand method, by:
 - a) identifying the positions which have foreign exchange risk;
 - b) calculating the net open position in each currency in accordance with Article 1 and the net gold position;
 - c) converting the net open position in each currency and the net gold position into US dollars equivalent (the official currency) at prevailing foreign exchange spot rates;
 - d) computing the overall net open position by:
 - i. calculating the aggregate long position by summing exposures in currencies having long positions;
 - ii. calculating the aggregate short position by summing exposures in currencies having short positions; and
 - iii. selecting the higher of absolute values of aggregate long position and aggregate short position, which will be considered the overall net open position.

Article 2 Capital charge for foreign exchange risk

1. A bank shall finally calculate its market risk capital charge for foreign exchange risk for its positions in foreign exchange, including gold, by summing up:

- a) the overall net open position in foreign currency calculated as detailed in Article 1; and
 - b) the absolute value of the net position (long or short) in gold.
2. The bank shall then multiply the net open position determined according to paragraph 1 of this Article by the market risk capital charge factor of 10% to determine the capital requirement for the foreign exchange market risk.

**Section II
Interest Rate Risk**

**Article 3
Approach**

1. This Section sets out the standard approach for measuring the risk of holding or taking positions in debt securities and other interest-rate instruments in the trading book, being not applicable to the banking book. The instruments covered include all fixed-rate and floating-rate debt securities and instruments that behave like them, including non-convertible preference shares.
2. The minimum capital requirement is expressed in terms of two separately calculated amounts, one applying to the “specific risk” of each security, whether it is a short or a long position, and the other to the interest rate risk in the portfolio (termed “general market risk”) where long and short positions in different securities or instruments can be offset.

**Article 4
Specific Risk**

1. The capital requirement for specific risk is designed to protect against an adverse movement in the price of an individual security owing to factors related to the individual issuer. In measuring the risk, offsetting will be restricted to matched positions in the identical issue (including positions in derivatives).
2. The specific risk capital requirements for “government” and “other” categories will be as follows:

Categories	External credit assessment	Specific risk capital requirement
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 and up to and including 24 months)
		1.60% (residual term to final maturity exceeding 24 months)
	BB+ to B-	10.00%
	Below B-	12.00%
	Unrated	10.00%
Other	Similar to credit risk charges under the standardized approach.	

3. The category “government” will include all forms of government paper including bonds, Treasury bills and other short-term instruments.

4. The specific risk capital requirement of securitization positions which are held in the trading book is to be calculated according to the method for such positions in the banking book described in the Annex IV. The risk-weighted asset amount of a securitization exposure is computed by multiplying the exposure amount by the appropriate risk weight.
5. A bank shall calculate the specific risk capital requirement applicable to each net securitization position by multiplying the risk weight calculated as if it were held in the banking book by 10%.
6. Full allowance will be recognized for positions hedged by credit derivatives when the values of two legs (ie long and short) always move in the opposite direction and broadly to the same extent. This would be the case in the following situations, in which cases no specific risk capital requirement applies to both sides of the position:
 - a) the two legs consist of completely identical instruments, or
 - b) a long cash position (or credit derivative) 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).
7. An 80% offset will be recognized when the value of two legs (i.e., long and short) always moves in the opposite direction but not broadly to the same extent, which shall be applied to the side of the transaction with the higher capital requirement, while the specific risk requirement on the other side will be zero.
8. Partial allowance will be recognized when the value of the two legs (i.e., long and short) usually moves in the opposite direction.
9. When paragraphs 6 to 8 apply, rather than adding the specific risk capital requirements for each side of the transaction (i.e., the credit protection and the underlying asset) only the higher of the two capital requirements will apply.
10. In other cases, a specific risk capital requirement will be assessed against both sides of the position.

Article 5

General Market Risk

1. The capital requirements for general market risk are designed to capture the risk of loss arising from changes in market interest rates. Banks shall use the following “maturity” method for measuring the risk and the capital requirement is the sum of four components:
 - a) the net short or long position in the whole trading book;
 - b) a small proportion of the matched positions in each time-band (the “vertical disallowance”);
 - c) a larger proportion of the matched positions across different time-bands (the “horizontal disallowance”); and
 - d) a net charge for positions in options, where appropriate.
2. In the maturity method, long or short positions in debt securities and other sources of interest rate exposures including derivative instruments are slotted into a maturity ladder comprising thirteen time-bands (or fifteen time-bands in case of low coupon instruments). Fixed-rate instruments shall be allocated

according to the residual term to maturity and floating-rate instruments according to the residual term to the next repricing date.

3. Opposite positions of the same amount in the same issues (but not different issues by the same issuer), whether actual or notional, can be omitted from the interest rate maturity framework, as well as closely matched swaps, forwards, futures and forward rate agreements (FRAs).
4. The first step in the calculation is to weight the positions in each time-band by a factor designed to reflect the price sensitivity of those positions to assumed changes in interest rates. The weights for each time-band are set out in Table 1 below.
5. Zero-coupon bonds and deep-discount bonds (defined as bonds with a coupon of less than 3%) should be slotted according to the time-bands set out in the second column of Table 1.

Table 1 - Maturity method: time-bands and weights

Coupon 3% or more	Coupon less than 3%	Risk weight	Assumed changes in yield
1 month or less	1 month or less	0.00%	1.00
1 to 3 months	1 to 3 months	0.20%	1.00
3 to 6 months	3 to 6 months	0.40%	1.00
6 to 12 months	6 to 12 months	0.70%	1.00
1 to 2 years	1.0 to 1.9 years	1.25%	0.90
2 to 3 years	1.9 to 2.8 years	1.75%	0.80
3 to 4 years	2.8 to 3.6 years	2.25%	0.75
4 to 5 years	3.6 to 4.3 years	2.75%	0.75
5 to 7 years	4.3 to 5.7 years	3.25%	0.70
7 to 10 years	5.7 to 7.3 years	3.75%	0.65
10 to 15 years	7.3 to 9.3 years	4.50%	0.60
15 to 20 years	9.3 to 10.6 years	5.25%	0.60
Over 20 years	10.6 to 12 years	6.00%	0.60
	12 to 20 years	8.00%	0.60
	Over 20 years	12.50%	0.60

6. The next step in the calculation is to offset the weighted longs and shorts in each time-band, resulting in a single short or long position for each band. The first component of capital requirement will be the net short or long position in the whole trading book.
7. However, since each band includes different instruments and different maturities, a 10% capital requirement to reflect basis risk and gap risk, as defined in Section IV, will be levied on the smaller of the offsetting positions, be it long or short. That is called “vertical disallowance” for that time-band.
8. The result of the above calculations is to produce two sets of weighted positions, the net long or short positions in each time-band and the vertical disallowances, which have no sign.
9. In addition, banks are allowed to conduct two rounds of “horizontal offsetting”:
 - a) first between the net positions in each of three zones, where zone 1 is set as zero to one year, zone 2 is set as one year to four years, and zone 3 is set as

four years and over (however, for coupons less than 3%, zone 2 is set as one year to 3.6 years and zone 3 is set as 3.6 years and over); and

b) subsequently between the net positions in the three different zones.

10. The offsetting will be subject to a scale of disallowances expressed as a fraction of the matched positions, as set out in Table 2 below. The weighted long and short positions in each of three zones may be offset, subject to the matched portion attracting a disallowance factor that is part of the capital requirement. The residual net position in each zone may be carried over and offset against opposite positions in other zones, subject to a second set of disallowance factors.

Table 2 - Horizontal disallowances and capital requirements

	Time band	Within the zone	Between adjacent zones	Between zones 1 and 3
Zone 1	0-1 month	40%	40%	100%
	1-3 months			
	3-6 months			
	6-12 months			
Zone 2	1-2 years	30%	40%	100%
	2-3 years			
	3-4 years			
	4-5 years			
Zone 3	5-7 years	30%	40%	100%
	7-10 years			
	10-15 years			
	15-20 years			
	Over 20 years			

11. The institution's own funds requirement for interest rate general risk shall be calculated as the sum of:

- a) 10 % of the sum of the matched weighted positions in all maturity bands;
- b) 40 % of the matched weighted position in zone one;
- c) 30 % of the matched weighted position in zone two;
- d) 30 % of the matched weighted position in zone three;
- e) 40 % of the matched weighted position between zones one and two and between zones two and three; and
- f) 100 % of the matched weighted position between zones one and three.

ARTICLE 6
Interest rate derivatives

1. 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, (eg FRAs, other forward contracts, bond futures, interest rate and cross-currency swaps and forward foreign exchange positions).

2. Options that must be measured under Section V of this Annex are excluded from this treatment
3. The derivatives shall be converted into positions in the relevant underlying and become subject to specific and general market risk charges as described above.
4. To calculate the standard formula described above, the amounts reported shall be the market value of the principal amount of the underlying.
5. Futures and forward contracts (including FRAs) are treated as a combination of a long and a short position in a notional government security. Interest-rate futures, forward-rate agreements (FRAs) and forward commitments to buy or sell debt instruments shall be treated as combinations of long and short positions. Thus a long interest-rate futures position shall be treated as a combination of a borrowing maturing on the delivery date of the futures contract and a holding of an asset with maturity date equal to that of the instrument or notional position underlying the futures contract in question. Similarly a sold FRA will be treated as a long position with a maturity date equal to the settlement date plus the contract period, and a short position with maturity equal to the settlement date. Both the borrowing and the asset holding shall be included in the first category set out in the table in Article 4 of this Section in order to calculate the own funds requirement for specific risk for interest-rate futures and FRAs. A forward commitment to buy a debt instrument shall be treated as a combination of a borrowing maturing on the delivery date and a long (spot) position in the debt instrument itself. The borrowing shall be included in the first category set out in the table in Article 4 of this Section for purposes of specific risk, and the debt instrument under whichever column is appropriate for it in the same table.
6. For the purposes of the previous paragraph, "long position" means a position in which an institution has fixed the interest rate it will receive at some time in the future, and "short position" means a position in which it has fixed the interest rate it will pay at some time in the future.
7. Swaps shall be treated for interest-rate risk purposes on the same basis as on-balance-sheet instruments. Thus, an interest-rate swap under which an institution receives floating-rate interest and pays fixed-rate interest shall be treated as equivalent to a long position in a floating-rate instrument of maturity equivalent to the period until the next interest fixing and a short position in a fixed-rate instrument with the same maturity as the swap itself.
8. Banks may exclude from the interest rate maturity framework altogether (for both specific and general market risk) long and short positions (both actual and notional) in identical instruments with exactly the same issuer, coupon, currency, and maturity. A matched position in a future or forward and its corresponding underlying may also be fully offset, and thus excluded from the calculation.

Section III Equity Risk

ARTICLE 7 Equity Risk Capital Requirement

1. This Section sets out a minimum capital standard to cover the risk of holding or taking positions in equities in the trading book. It applies to long and short positions in all instruments that exhibit market behavior similar to equities, but not to non-convertible preference shares. The instruments covered include common stocks (whether voting or non-voting), convertible securities that behave like equities, and commitments to buy or sell equity securities, and derivative products.
2. Long and short positions in the same issue may be reported on a net basis.
3. The minimum capital standard for equities is also expressed in terms of two separately calculated capital requirements 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.
4. Specific risk is defined as the bank’s gross equity positions (i.e., the sum of all long equity positions and of all short equity positions) and general market risk as the difference between the sum of the longs and the sum of the shorts (i.e., the overall net position in an equity market).
5. 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 bank holds equities.
6. The capital requirement for specific risk is the product of the gross equity position by 10%.
7. The capital requirement for general market risk is the product of the net equity position by 10%.

Article 8 Equity Derivatives

1. All equity derivatives and off-balance-sheet positions, except options that shall have the treatment under Section V, 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 positions in the relevant underlying asset.
2. To calculate the standard formula for specific and general market risk, positions in derivatives should 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;
 - d) Equity options and stock index options shall be “carved out” together with the associated underlying.

3. 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.
4. The capital requirement for specific risk and for general market risk will each be 10%.
5. Besides general market risk, a further capital requirement of 2% will apply to the net long or short position in an index contract comprising a diversified portfolio of equities.

Section IV Commodity Risk

Article 9 Scope

1. This Section sets out the standardized approach for measuring risk of holding or taking positions in commodities, including precious metals, but excluding gold, which is treated as a foreign currency. A commodity is defined as a physical product which is or can be traded on a secondary market, e.g., agricultural products, minerals (including oil) and precious metals.
2. The price risk in commodities is often more complex and volatile than that associated with currencies and interest rates. Commodity markets may also be less liquid than those for interest rates and currencies and, as a result, changes in supply and demand can have a more dramatic effect on price and volatility. These market characteristics can make price transparency and the effective hedging of commodities risk more difficult.
3. The risks associated with commodities include the following risks:
 - a) For spot or physical trading, the directional risk arising from a change in the spot price is the most important risk.
 - b) However, banks using portfolio strategies involving forward and derivative contracts are exposed to a variety of additional risks, which may well be larger than the risk of a change in spot prices. These include:
 - i. basis risk (the risk that the relationship between the prices of similar commodities alters through time);
 - ii. interest rate risk (the risk of a change in the cost of carry for forward positions and options); and
 - iii. forward gap risk (the risk that the forward price may change for reasons other than a change in interest rates).
 - c) In addition, banks may face counterparty credit risk on over-the-counter derivatives.
4. The funding of commodities positions may well open a bank to interest rate or foreign exchange exposure and if that is, so the relevant positions should be included in the measures of interest rate and foreign exchange risk described above.

Article 10
Commodities Risk and Capital Requirements

1. Commodities risk can be measured using a simplified approach described below.
2. Positions in the separate commodities shall be determined. Long and short positions in each commodity may be reported on a net basis for the purposes of calculating open positions. However, positions in different commodities will not be offsetable.
3. In calculating the capital requirements banks will first have to express each commodity position (spot plus forward) in terms of the standard unit of measurement (barrels, kilos, grams, etc.). The net position in each commodity will then be converted at current spot rates into US dollars.
4. All commodity derivatives and off-balance-sheet positions which are affected by changes in commodity prices shall be included in this measurement framework.
5. Commodity derivatives shall be converted into notional commodities positions.
6. The capital requirement will equal 15% of the net position, long or short, in each commodity.
7. To protect the bank against basis risk, interest rate risk and forward gap risk under the simplified approach, the capital requirement for each commodity as described above will be subject to an additional capital requirement equivalent to 3% of the bank's gross positions, long plus short, in that particular commodity. In valuing the gross positions in commodity derivatives for this purpose, banks shall use the current spot price.

Section V
Treatment of Options

Article 11
Methodology

1. Banks which solely use purchased options (refers to the long positions) can adopt the simplified approach for determining the capital requirements for options.
2. In this simplified approach for options, the positions for the options and the associated underlying, cash or forward, are not subject to the standardized methodology but rather are "carved-out" and subject to separately calculated capital requirements that incorporate both general market risk and specific risk.
3. The risk numbers thus generated are then added to the capital requirements for the relevant category, i.e., interest-rate-related instruments, equities, foreign exchange and commodities.
4. For long cash and long put positions, or short cash and long call, the capital requirement will be the market value of the underlying security multiplied by the sum of specific and general market risk charges for the underlying security (underlying instrument) less the amount the option is in the money (if any) bounded at zero.
5. For long call or long put positions, the capital requirement will be the lesser of:

- a) the market value of the underlying security multiplied by the sum of specific and general market risk charges for the underlying security (underlying instrument); and
 - b) the market value of the option.
6. For those banks which also write options, the options shall be treated as if they were positions equal in value to the amount of the underlying instrument to which the option refers, multiplied by its delta for the purposes of this Section. The latter positions may be netted off against any offsetting positions in the identical underlying securities or derivatives. The delta measures the sensitivity of the option price to changes in the price of the underlying asset. The delta to be used shall be that of the exchange concerned. For OTC-options, or where delta is not available from the exchange concerned, the institution may calculate delta itself using an appropriate model, subject to permission by BCTL. Permission is granted if the model adequately estimates the rate of change in the option's value relative to small changes in the market price of the underlying instrument.
 7. Banks can use a different approach if previous approval from BCTL is obtained.
 8. While the referred approaches are not used, the capital requirement for written options is the market value of the underlying security multiplied by the sum of specific and general market risk charges for the underlying security (underlying instrument).
 9. If all the bank's written option positions are hedged by perfectly matched long positions in exactly the same options, however, no capital requirement for market risk is required.

ANNEX VII- REGULATORY CAPITAL FRAMEWORK TEMPLATES

Code of Template	Name of the Template
CA1	Own Funds
CA2	Own Funds Requirements
CA3	Capital Ratios
CR1	Credit quality of assets
CR2	Changes in stock of defaulted loans and debt securities
CR3	Credit risk mitigation techniques – overview
CR4	Standardized approach – Credit risk exposure and credit risk mitigation effects
CR5	Standardized approach – exposures by asset classes and risk weights
CCR1	Standardized approach – CCR exposures by regulatory portfolio and risk weights
CCR2	Credit derivatives exposures
CCR3	Composition of collateral for CCR exposure
CCR4	Exposures to central counterparties
SEC	Securitization exposures
SEC1	Securitization exposures in the banking book
SEC2	Securitization exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor
SEC3	Securitization exposures in the banking book and associated capital requirements – bank acting as investor
MR1	Market risk standardized approach for positions in traded debt instruments
MR2	Market risk standardized approach for specific securitizations
SEC4	Securitization exposures in the trading book
SEC5	Securitization exposures in the trading book and associated capital requirements
MR3	Market risk standardized approach for positions in equities
MR4	Market risk standardized approach for foreign exchange risk
MR5	Market risk simplified approach for commodities
OP1	Operational Risk - Basic Indicator Approach
LevR1	Leverage Ratio and Exposure Measure
LevR2	Leverage Ratio

CA1 - OWN FUNDS

Code	Item	Amount
1	OWN FUNDS	0
2	TIER 1 CAPITAL	0
3	COMMON EQUITY TIER 1 CAPITAL (CET1)	0
4	Paid up capital instruments	
5	Share premium	
6	(-) Own CET1 Instruments	
7	(-) Actual or contingent obligations to purchase own CET1 instruments	
8	Retained earnings	0
9	Previous years retained earnings	
10	Profit or loss eligible	
11	Accumulated other comprehensive income	
12	Other reserves	
13	Funds for general banking risk	
14	Minority interest given recognition in CET1 capital	
15	Adjustments to CET1 due to prudential filters	0
16	(-) Increases in equity resulting from securitized assets	
17	Cash flow hedge reserve	
18	Cumulative gains and losses due to changes in own credit risk on fair valued liabilities	
19	Fair value gains and losses arising from the institution's own credit risk related to derivative liabilities	
20	(-) Goodwill	0
21	(-) Goodwill accounted for as intangible asset	
22	(-) Goodwill included in the valuation of significant investments	
23	Deferred tax liabilities associated to goodwill	
24	(-) Other intangible assets	0
25	(-) Other intangible assets gross amount	
26	Deferred tax liabilities associated to other intangible assets	
27	(-) Defined benefit pension fund assets	0
28	(-) Defined benefit pension fund assets gross amount	
29	Deferred tax liabilities associated to defined benefit pension fund assets	
30	Defined benefit pension fund assets which the institution has an unrestricted ability to use	
31	(-) Reciprocal cross holdings in CET1 Capital	
32	(-) Excess of deduction from AT1 items over AT1 Capital	
33	(-) Qualifying holdings outside the financial sector which can alternatively be subject to a 1250% risk weight	
34	(-) Securitization positions which can alternatively be subject to a 1250% risk weight	

35	(-) CET1 instruments of financial sector entities subject to deduction	
36	(-) Deductible deferred tax assets that rely on future profitability and arise from temporary differences	
37	CET1 capital elements or deductions - other	
38	ADDITIONAL TIER 1 CAPITAL (AT1)	0
39	Capital instruments eligible as AT1 Capital	0
40	Paid up capital instruments	
41	Share premium	
42	(-) Own AT1 instruments	
43	(-) Actual or contingent obligations to purchase own AT1 instruments	
44	(-) Reciprocal cross holdings in AT1 Capital	
45	(-) AT1 instruments of financial sector entities to be deducted	
46	(-) Excess of deduction from T2 items over T2 Capital	
47	Excess of deduction from AT1 items over AT1 Capital (deducted in CET1)	
48	AT1 capital elements or deductions - other	
50	TIER 2 CAPITAL	0
51	Capital instruments and subordinated loans eligible as T2 Capital	0
52	Paid up capital instruments and subordinated loans	
53	Share premium	
54	(-) Own T2 instruments	
55	(-) Actual or contingent obligations to purchase own T2 instruments	
56	General credit risk adjustments	
57	(-) Reciprocal cross holdings in T2 Capital	
58	(-) T2 instruments of financial sector entities to be deducted	
59	Excess of deduction from T2 items over T2 Capital (deducted in AT1)	
60	T2 capital elements or deductions - other	

CA2 - OWN FUNDS REQUIREMENTS AND CA3 - CAPITAL RATIOS

CA2 - OWN FUNDS REQUIREMENTS

Code	Item	Amount
1	TOTAL RISK EXPOSURE AMOUNT	#DIV/0!
2	RISK WEIGHTED EXPOSURE AMOUNTS FOR CREDIT AND COUNTERPARTY CREDIT RISKS	0
3	By exposure classes excluding securitization positions	0
4	Central governments or central banks	0
5	Regional governments or local authorities	0
6	Public sector entities	0
7	Multilateral Development Banks	0
8	Banks	0
9	Non-bank financial institutions	0
10	Corporates (non-financial institutions)	0
11	Retail	0
12	Secured by mortgages on immovable property	0
13	Exposures in default	0
14	Items associated with particular high risk	0
15	Equity	0
16	Other items	0
17	Securitization positions	0
18	TOTAL MARKET RISK EXPOSURE AMOUNT FOR POSITIONS, FOREIGN EXCHANGE AND COMMODITIES RISKS	0
19	Traded debt instruments (including securitization)	0
20	Equity	0
21	Foreign Exchange	0
22	Commodities	0
23		
	TOTAL RISK EXPOSURE AMOUNT FOR OPERATIONAL RISK (OpR)	#DIV/0!
24	OpR Basic indicator approach (BIA)	#DIV/0!
25	OTHER RISK EXPOSURE AMOUNTS	0
26	Of which: Additional stricter prudential requirements determined by BCTL	

CA 3 - CAPITAL RATIOS

Code	Item	Amount
1	CET1 Capital ratio	#DIV/0!
2	Surplus(+)/Deficit(-) of CET1 capital	#DIV/0!
3	T1 Capital ratio	#DIV/0!
4	Surplus(+)/Deficit(-) of T1 capital	#DIV/0!
5	Total capital ratio	#DIV/0!
6	Surplus(+)/Deficit(-) of total capital	#DIV/0!
7	Capital buffers	#DIV/0!
8	Capital conservation buffer	#DIV/0!
9	Surplus(+)/Deficit(-) of CET1 capital	#DIV/0!
10	Countercyclical capital buffer	#DIV/0!
11	Surplus(+)/Deficit(-) of total capital buffers	#DIV/0!

CR1: Credit quality of assets and CR2: Changes in stock of defaulted loans and debt securities

CR1: Credit quality of assets

		Gross carrying values of		Allowances / Impairment (c)	Of which ECL accounting provisions for credit losses on standardised approach exposures		Net values
Code	Item	Defaulted exposures (a)	Non- defaulted exposures (b)		Allocated as ECL Allowance (d)	Allocated as Reserve for Credit Risk (e)	(a+b-c)
1	Loans						
2	Debt Securities						
3	Off-balance sheet exposures						
4	Total						

CR2: Changes in stock of defaulted loans and debt securities

Code	Item	Amount
1	Defaulted loans and debt securities at end of the previous reporting period	
2	Loans and debt securities that have defaulted since the last reporting period	
3	Returned to non-defaulted status	
4	Amounts written off	
5	Other changes	
6	Defaulted loans and debt securities at end of the reporting period	

CR3: Credit risk mitigation techniques – overview

		Exposures unsecured: carrying amount	Exposures to be secured	Exposures secured by collateral	Exposures secured by financial guarantees	Exposures secured by credit derivatives
1	Loans					
2	Debt securities					
3	Total					
4	Of which defaulted					

CR4: Standardized approach – Credit risk exposure and credit risk mitigation effects

Item	Asset classes	Exposures before CCF and CRM		CRM Techniques				Exposures post-CCF and CRM		RWA and RWA density	
		On-balance sheet amount	Off-balance sheet amount	Guarantees	Credit Derivatives	Collateral	Netting	On-balance sheet amount	Off-balance sheet amount	RWA	RWA density
1	Sovereigns and their central banks										0%
2	Non-central government public sector entities										0%
3	Multilateral development banks										0%
4	Banks										0%
5	Non-bank financial institutions										0%
6	Corporates (non-financial entities)										0%
7	Retail portfolios										0%
8	Secured by residential property										0%
9	Secured by commercial real estate										0%
10	Equity										0%
11	Past-due loans										0%
12	Higher-risk categories										0%
13	Other assets										0%
14	Total									1	100%

CR5: Standardized approach – exposures by asset classes and risk weights

Item	Risk weight*→ Asset classes↓	0%	10%	20%	30%	50%	75%	85%	100%	150%	From 150% to 1250%	1250% and Others	Total credit exposures amount (post CCF and post-CRM)
1	Sovereigns and their central banks												
2	Non-central government public sector entities												
3	Multilateral development banks												
4	Banks												
5	Non-bank financial institutions												
6	Corporates (non-financial entities)												
7	Retail portfolios												
8	Secured by residential property												
9	Secured by commercial real estate												
10	Equity												
11	Past-due loans												
12	Higher-risk categories												
13	Other assets												
14	Total												

CCR1: Standardized approach – CCR exposures by regulatory portfolio and risk weights

Item	Risk weight*→ Regulatory Portfolio↓	0%	10%	20%	35%	50%	75%	85%	100%	150%	From 150% to 1250%	1250% and Others	Total Credit Exposures Amount	RWA
1	Sovereigns													
2	Non-central government public sector entities													
3	Multilateral development banks													
4	Banks													
5	Non-bank financial institutions													
6	Corporates (non-financial entities)													
7	Regulatory retail portfolios													
8	Other assets													
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0

CCR2: Credit derivatives exposures

	a	b
	Protection bought	Protection sold
Nationals		
Single-name credit default swaps		
Index credit default swaps		
Total return swaps		
Credit options		
Other credit derivatives		
Total notional		
Fair values		
Positive fair value (asset)		
Negative fair value (liability)		

CCR3: Composition of collateral for CCR exposure

	a	b	c	d	e	f
	Collateral used in derivative transactions				Collateral used in SFTs	
	Fair value of collateral received		Fair value of posted collateral		Fair value of collateral received	Fair value of posted collateral
	Segregated	Unsegregated	Segregated	Unsegregated		
Cash – domestic currency						
Cash – other currencies						
Domestic sovereign debt						
Other sovereign debt						
Government agency debt						
Corporate bonds						
Equity securities						
Other collateral						
Total						

CCR4: Exposures to central counterparties

Code	Exposures	a	b
		EAD (post-CRM)	RWA
1	Exposures to qualifying CCPs (QCCPs) (total)		0
2	Exposures for trades at QCCPs (excluding initial margin and default fund contributions); of which		0
3	(i) over-the-counter (OTC) derivatives		
4	(ii) Exchange-traded derivatives		
5	(iii) Securities financing transactions		
6	(iv) Netting sets where cross-product netting has been approved		
7	Segregated initial margin		
8	Non-segregated initial margin		

9	Pre-funded default fund contributions		
10	Unfunded default fund contributions		
11	Exposures to non-QCCPs (total)		0
12	Exposures for trades at non-QCCPs (excluding initial margin and default fund contributions); of which		0
13	(i) OTC derivatives		
14	(ii) Exchange-traded derivatives		
15	(iii) Securities financing transactions		
16	(iv) Netting sets where cross-product netting has been approved		
17	Segregated initial margin		
18	Non-segregated initial margin		
19	Pre-funded default fund contributions		
20	Unfunded default fund contributions		

SEC: Securitization exposures (SEC1, SEC2, SEC3)

SEC1: Securitization exposures in the banking book

Item	Exposure	Bank acts as originator			Bank acts as sponsor			Banks acts as investor		
		Tradition al	Synthe tic	Sub- total	Tradition al	Synthe tic	Sub- total	Tradition al	Synthe tic	Sub-total
1	Retail (total)									
	- of which									
2	residential mortgage									
3	credit card									
4	other retail exposures									
5	re-securitization									
6	Wholesale (total)									
	- of which									
7	loans to corporates									
8	commercial mortgage									
9	lease and receivables									
10	other wholesale									
11	re-securitization									

SEC2: Securitisation exposures in the banking book and associated regulatory capital requirements – bank acting as originator or as sponsor

		a	b	c	d	e	g	i	k	m	o	q
		Exposure values (by risk weight bands)					Exposure Values (by regulatory approach)		RWA (by regulatory approach)		Capital charge after cap	
		≤20%	>20% to 50%	>50% to 100%	>100% to <1250% RW	1250%	SEC-ERBA	1250%	SEC-ERBA	1250%	SEC-ERBA	1250%
1	Total exposures	0	0	0	0	0	0	0	0	0	0	0
2	Traditional securitization											
3	Of which securitization											
4	Of which retail underlying											
6	Of which wholesale											
8	Of which re-securitization											
9	Synthetic securitization											
10	Of which securitization											
11	Of which retail underlying											
12	Of which wholesale											
13	Of which re-securitization											

SEC3: Securitization exposures in the banking book and associated capital requirements – bank acting as investor

		a	b	c	d	e	g	i	k	m	o	q
		Exposure values (by risk weight bands)					Exposure Values		RWA		Capital charge	
		≤20%	>20% to 50%	>50% to 100%	>100% to <1250%	1250%	SEC-ERBA	1250%	SEC-ERBA	1250%	SEC-ERBA	1250%
1	Total exposures	0	0	0	0	0	0	0	0	0	0	0
2	Traditional securitization											
3	Of which securitization											
4	Of which retail underlying											
6	Of which wholesale											
8	Of which re-securitization											
9	Synthetic securitization											
10	Of which securitization											
11	Of which retail underlying											
12	Of which wholesale											
13	Of which re-securitization											

MR2: MARKET RISK STANDARDIZED APPROACH FOR SPECIFIC RISK IN SECURITIZATIONS

SEC4: Securitization exposures in the trading book

		a	c	d	e	g	h	i	k	l
		Bank acts as originator			Bank acts as sponsor			Banks acts as investor		
		Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total	Traditional	Synthetic	Sub-total
1	Retail (total) – of which									
2	residential mortgage									
3	credit card									
4	other retail exposures									
5	re-securitization									
6	Wholesale (total) - of which									
7	loans to corporates									
8	commercial mortgage									
9	lease and receivables									
10	other wholesale									
11	re-securitization									

SEC5: Securitization exposures in the trading book and associated capital requirements.

		a	b	c	d	e	g	i	k	m	o	q
		Exposure values (by risk weight bands)					Exposure Values		RWA		Capital Charge	
		≤20 %	>20% to 50%	>50% to 100%	>100% to <1250%	1250%	SEC-ERBA	1250%	SEC-ERBA	1250 %	SEC-ERBA	1250%
1	Total exposures	0	0	0	0	0	0	0	0	0	0	0
2	Traditional securitization											
3	Of which securitization											
4	Of which retail underlying											
6	Of which wholesale											
8	Of which re-securitization											
9	Synthetic securitization	0										
10	Of which securitization											
11	Of which retail underlying											
12	Of which wholesale											
13	Of which re-securitization											

MR3: MARKET RISK STANDARDISED APPROACH FOR POSITION RISK IN EQUITIES

		POSITIONS					OWN FUNDS REQUIREMENTS OWN FUNDS REQUIREMENTS OWN FUNDS REQUIREMENTS
		ALL POSITIONS		NET POSITIONS		POSITIONS SUBJECT TO CAPITAL CHARGE POSITIONS SUBJECT TO CAPITAL CHARGE	
		LONG	SHORT	LONG	SHORT		
1	EQUITIES IN TRADING BOOK						0
2	General risk	0	0			0	0
3	Derivatives						
4	Other assets and liabilities						
5	Exchange traded stock-index futures broadly diversified subject to particular approach						
6	Other equities than exchange traded stock-index futures broadly diversified						
7	Specific risk	0	0			0	0
	Additional requirements for options - simplified method	-	-	-	-	-	
9	Additional requirements for written options	-	-	-	-	-	
10	TOTAL RISK EXPOSURE AMOUNT	-	-	-	-	-	0

MR4: MARKET RISK - STANDARDISED APPROACHES FOR FOREIGN EXCHANGE RISK

	TOTAL POSITIONS IN NON-REPORTING CURRENCIES	ALL POSITIONS		NET POSITIONS	
		LONG	SHORT	LONG	SHORT
1	Euro				
2	Australian Dollar				
3	Singaporean Dollar				
4	Pound Sterling				
5	Yen				
6	Hong Kong Dollar				
7					
8					
	AGGREGATE POSITIONS IN NON-REPORTING CURRENCIES				
11	FOREX RISK CALCULATION	AMOUNT			
12	HIGHEST ABSOLUTE VALUE OF AGGREGATE POSITION				
13	ABSOLUTE VALUE OF THE NET POSITION IN GOLD				
14	MARKET RISK EXPOSURE FOR FOREIGN EXCHANGE				0
15	OWN FUNDS REQUIREMENT				0

MR5: MARKET RISK - SIMPLIFIED APPROACH FOR COMMODITIES

	ALL POSITIONS		NET POSITIONS		POSITIONS SUBJECT TO ADDITIONAL CAPITAL CHARGE	OWN FUNDS REQUIREMENTS
	LONG	SHORT	LONG	SHORT		
TOTAL POSITIONS IN COMMODITIES						
Precious metals (except gold)					0	0
Base metals					0	0
Agricultural products (softs)					0	0
Others					0	0
Of which energy products (oil, gas)					0	0
Simplified approach: All positions						0
Requirements for options - simplified approach						
Additional requirements for written options						
TOTAL OWN FUNDS REQUIREMENTS						0
TOTAL RISK EXPOSURE AMOUNT						0

OP1: OPERATIONAL RISK - BASIC INDICATOR APPROACH

BANKING ACTIVITIES SUBJECT TO BASIC INDICATOR APPROACH (BIA)	YEAR-3	YEAR-2	LAST YEAR
Interest receivable and similar income (-) Interest payable and similar charges			
Net gains (or losses) on assets at fair value through profit or loss			
Net gains (or losses) on foreign currency			
Net profit (or loss) on financial operations			
Dividends and other income on equity			
Commissions/fees receivable			
Commissions/fees payable			
Other operating income			
Annual Grosss Income			
Sum of Positive Gross Income			0
Average of Three Years Gross Income	n=	0	#DIV/0!
Own Funds Requirement			#DIV/0!
Total Operational Risk Weight Exposure			#DIV/0!

LevR1: LEVERAGE RATIO AND EXPOSURE MEASURE

Code	Item	Amount	CCF	LR Exposure End-of-Period
1	EXPOSURE MEASURE			0
2	Non-trading book exposures			0
3	Covered bonds		100%	
4	Exposures treated as sovereigns		100%	0
5	Central governments and central banks		100%	
6	Regional and local government		100%	
7	MDBs and International Organizations (sovereigns)		100%	
8	PSEs treated as sovereigns		100%	
9	Exposures not treated as sovereigns		100%	0
10	Regional and local government		100%	
11	MDBs and International Organizations		100%	
12	Public Sector Enterprises		100%	
13	Related Institutions		100%	
14	Secured by mortgages of non-residential immovable properties		100%	
15	Secured by mortgages of residential properties		100%	
16	Retail exposures, except SME		100%	
17	Retail SME		100%	
18	Corporate		100%	0
19	Financial		100%	
20	Non-financial		100%	0
21	SME exposures		100%	
22	Corporate exposures other than SME		100%	
23	Exposures in default		100%	
24	Securitization exposures		100%	
25	Other exposures (equity, other non-credit obligation assets, etc.)		100%	
26	Off-balance sheet items, derivatives, SFTs and trading book			0
27	Derivatives (with add-ons)			0
28	Credit derivatives (protection sold)		100%	
29	Credit derivatives (protection bought)		100%	
30	Financial derivatives		100%	
31	SFT when bank is principal		100%	
32	SFT when bank is agent		100%	
33	Other assets belonging to trading book		100%	
34	Commitments with an original maturity up to one year		20%	
35	Commitments with an original maturity over to one year		50%	
36	Unconditionally cancellable credit cards commitments		10%	
37	Non revolving unconditionally cancellable commitments		10%	
38	Direct credit substitutes		100%	

39	Forward asset purchases representing commitments w/certain drawdown		100%	
40	Note issuance facilities		50%	
41	Revolving underwriting facilities		50%	
42	All OBS securitization exposures, except eligible liquidity facilities		100%	
43	Eligible liquidity facility on securitization		50%	
44	Short-term trade letters of credit		20%	

LevR2: LEVERAGE RATIO

Capital Measure		
Tier 1 Capital (as determined on CA1)		0
Exposure Measure		0
LEVERAGE RATIO		#DIV/0!